A COMPARATIVE STUDY OF APPROACHES TO LEARING OF CHINESE BACKGROUND STUDENTS FROM MAINLAND CHINA, HONG KONG, MALAYSIA AND SINGAPORE IN AUSTRALIAN EDUCATIONAL DISCOURSE

BY

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Declaration

I declare that this thesis does not contain material which has been accepted for the award of any other degree or diploma in any university; nor does it contain material previously published or written by any other person, except where due reference is made in the text of the thesis.

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Abstract

The aim of this PhD research is to uncover different Chinese nationals' approaches to learning with a view to enhancing their learning efficiency as well as informing approaches to Australian course design and delivery. In a broader sense, this research aims to explore the national identities of Chinese students from differing backgrounds (mainland China, Hong Kong, Malaysia, and Singapore). Quantitative and qualitative approaches were used in this study. 179 Chinese students at two Australian universities participated in the questionnaire of OECD model with a focus on learning strategies, motivation, self-related beliefs and learning preferences. Several students participated individually in an interview. According to the findings, there was a consistency among Chinese students of different regions in their views and behaviours about their approaches to learning in tertiary education in Australia. However there were also some differences in regards to the use of some learning strategies. For example, Mainland Chinese students strongly valued the function of understanding in learning and the use of elaboration strategies. They also showed more instrumental motivation than interest compared to other groups. Hong Kong students strongly favoured memorization strategies in the belief that repetition could improve understanding. The analysis of the interview data gave important insights about their views on learning, national identity, and academic achievement.

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Chapter 1

Introduction

1.1 My reflective journey

Overseas study experience is a truly successful and rewarding program for young people. This will increase their cross-cultural awareness with the knowledge of, and appreciation for global issues, languages, history, geography, literature, and the arts of other countries. By studying foreign cultures and languages and living abroad, they gain a better understanding of the many similarities that are shared and learn to respect their differences. Personally study in Australia has endowed me with a wealth of lifetime experience. Apart from, as expected, experiencing the differences of western culture and democracy, I surprisingly find some diversities even existing among Chinese ethnic students studying in Australia. This could be regarded as the highest benefit of my international education experience that really broadens my experience in life, the awareness of the differences of Chinese ethnic students from countries with considerable Chinese population.

The first time that I ventured to study overseas was in 1999 to Melbourne, Australia for half a year, on the group sponsored by one Chinese municipal government. In Melbourne, for the first time, I saw many ethnic Chinese students from different countries and regions speaking the same language, Mandarin, although with some accents. My attention was first drawn to their friendly greetings, then their attitudes to China. I still remember a Singaporean student that I met on a campus bus in La Trobe University first said hello to me very warmly and asked about my impression of Australian education. When I replied that China was 50 years behind Australia, to my surprise, she bluntly replied: "at least 100 years". Another personal experience also convinced me of some differences among the students from different Chinese

speaking countries A Hong Kong student I met in a computer lab was quite reluctant to get involved with students from mainland China. It was at that moment, only two years after Hong Kong was returned to China.

When I met students who spoke Mandarin, the first instinct or impulse was a sense of warmth and closeness, I felt close to them as if there was a strong bond of our Chinese identity. But soon that strong feeling of solidarity started to evaporate slowly, partly due to emerging differences in our world views, particularly about our perception of 'being Chinese'. Perhaps there were some fundamental differences in our attitudes and views about teaching and learning, particularly on questions such as: Why are we here? What do we expect? How should we approach the educational discourse in Australia?

In early 2005, with all these puzzling questions still active in my mind, I returned to Australia to pursue my PhD study, both for my personal interest and career pathway. Research is metaphorically a journey in which researchers try their best to examine critically issues and problems in order to contribute to existing knowledge in a research discourse. For me, this research journey is more fascinating and rewarding as it is also an inward journey to understand myself as a Chinese student in the Australian educational context.

1.2 Introduction

The purpose of this chapter is to set the scene for the investigation of Chinese background students (CBS) from mainland China, Hong Kong, Malaysia, and Singapore. This chapter is organised around several themes as follows:

- the background and justification of the research is presented
- the research aim is outlined
- research questions and objectives are stated
- the research methodology underpinning this study is discussed and finalised, in terms of method, data collection and data analysis' and
- the significance and limitations of this study are explored.

1.2 Background leading to this study

Over the past two decades, increasing numbers of overseas students have come to Australia. The provision of education to international students has played a major part in Australian services trade. In 2002, there were 273,552 international students enrolled in Australia, but in 2005 the figure increased to 344,815, a growth of almost an average of 8% per year (AEI-International Education Network, 2005). In 2005, 9 of the top 10 source countries were in Asia, accounting for 68.8% of the total number of overseas students. Students from mainland China, Hong Kong, Malaysia, and Singapore represented 38.2% of the Asian total.

A great deal of research relates to Chinese background students, though, as yet there has been no comparative study within the major Chinese student subgroups, i.e. mainland China, Hong Kong, Malaysia, and Singapore. The relevant studies conducted by most researchers described these national groups of students as a homogeneous group, for example 'Academic adaptation: mainland Chinese students in graduate programs at a Canadian university' by Liang (2004), 'International students studying in Australia: responses to learning styles, issues and problems' by Barron (2005), 'The reflective learner: Chinese international students' use of strategies to enhance university study' by Skyrme (2005), and 'It's more than a piece of paper: Chinese students' experience of learning Australia' by Zhang (2005).

In reviewing the literature concerning approaches to learning used by Chinese background students, it revealed that only one study was identified as relevant to the comparative study of ethnic Chinese students from different national backgrounds. This was the work of Smith (2001). Smith's study showed, for the first time, differences in approaches to learning within the three national groups of Chinese learners. The findings in learning approaches noted in Smith's study suggest that caution needs to be taken against forming fixed conceptualisations of the cultural characteristics of Chinese background students in western educational environments, and considerable care needs to be given to sample definition and selection in further cross-cultural research regarding these students. As only one study was conducted in the area related to diversity amongst Chinese background students from different nations and regions, more research needs to be carried out to substantiate and extend its findings. This research has the potential to enrich the literature of comparative

educational studies on approaches to learning used by Chinese background students with different nationalities and ethnicities at Australian universities.

Measurement of approaches to learning has used the patterns of surface and deep approaches to learning, which was first created by Marton and Saljo (1976) and later enriched by Biggs'achieving approach to learning (1988). A surface approach features the intention to complete task requirements, memorising information needed for assessments, and has been associated with poorer quality outcomes when compared to a deep approach. A deep approach to learning is characterised with intention to understand, relating new ideas to previous knowledge and relating concepts to everyday experience. This has been claimed by Marton and Biggs as leading to good understanding, long term recall and better performances. An achieving approach to learning refers to a learning behaviour which involves students intending to get the best possible grades, to work towards assignments, not personal interest, to focus on what the teacher is looking for, to aspire for ego gratification through external rewards, and to organise time, work space, and scheduling. This differentiation was queried by Kember and Gow (1990) and Kember, Wong and Leung (1999) as being unclear between the deep approach and achieving approach. Biggs then returned to Marton's two dimensional notions of approaches to learning. However in 2003 an Oxford University investigation (2003) indicated that surface and deep approaches to learning were not two different learning styles, but were learning skills that cater for different learning tasks.

In the same year, OECD (Organization for Economic Co-operation and Development) (2003)instigated a new set of approaches to learning created by experts from 22 OECD member countries and 4 non-member countries which soon became popular in these countries. This made the PISA (Programme for International Student Assessment) project of OECD the most influential project in the field of approaches to learning to date worldwide. In the PISA project, approaches to learning were described as consisting of three major components: learning strategies, motivation and self-related beliefs. Learning strategies are the methods that students use to learn, including memorisation strategies, elaboration strategies and control strategies. Motivation was defined as two dimensions: interest, and instrument motivation which refers to external rewards such as job prospects. Self-related

beliefs refer to beliefs in one's ability to handle learning tasks. Apart from these three components, learning preferences were also considered by OECD, although there were no definite outcomes regarding these. None of the Asian countries had the chance to share the research results except South Korea, the only one to participate in the project (OECD, 2003). Consequently, it is meaningful to apply the findings of this project to Chinese background students to gain a better understanding of their learning behaviour.

In the process of examining the approaches to learning of these students, this study also has the potential to further test the still widely held view of a good number of Australian lecturers that Chinese background students are rote learners. Chinese background students are prone to be regarded as rote learners, as Biggs and Watkins (1996, p. 270) described 'cultural astigmatism' in their remarks: 'when CHC (Confucian Heritage Culture) people are viewed through the lenses of familiar Western polarities, the focus becomes blurred and even distorted'. Biggs and Watkins (1996) claim that CHC students use repetition as part of their learning strategies a good deal more than Westerners do. A conventional Australian view on Asian approaches to learning portrays Asian students as adopting surface, rote learning strategies in their approaches to study (Biggs, 1987a; Ling, Arger, Filonenko, Chua, & Yin, 2005). Furthermore, a study found that prior learning of Chinese students is of little use to them (Jones, Chen, & Li, 2004). The conventional Australian concept of Chinese students is derived from Biggs' and Kember's (1987a; 2001; 1990) investigations of student approaches to learning and Ballard and Clanchy's (1991; 1997) investigation of study approaches of international students in which Asian students (including Chinese students) are presumed to bring with them learning experiences that favour 'rote, reproductive, surface, teacher-centred and dependent approaches to learning' (Devos, 2003; Gribble & Ziguras, 2003; Ling et al., 2005; Ninnes, Aitchison, & Kalos, 1999). This stereotype of Asian international students' approaches to study has been challenged on the grounds that it fails to recognise differences by country (Burns, 1991; Chalmers & Volet, 1997; Ninnes et al., 1999), and on the grounds that it involves a misunderstanding of Asian students' approaches to study (Ramburuth & McCormick, 2001). For that reason, this study considers this issue at the same time as exploring the students' approaches to learning.

In addition to researching approaches to learning, this study also investigates the national identity of these students on account of its attribution which is highly related to approaches to learning. In accordance with the clarification of approaches to learning by OECD, learning strategies, motivation, and self-related beliefs make up the major three components of approaches to learning. While motivation and self-related beliefs as verified by OECD (2003) showed a strong correlation with the adoption of proper learning strategies, which in turn affect learning performance considerably. Motivation and self-related beliefs are also principal attributes in identity, common identity within a group, and even within a nation. As a consequence, understanding the national identities of these students will help Australian educators not only reasonably interpret their learning behaviour but also their thinking modes for the good of teaching quality. However, in so far as the national identities of Chinese background students are concerned, there is only one study, conducted by Back(2001) in his 'Issues of Identity and Control for Chinese Students in Australia', in which interconnected Chinese values and dynamics were identified as four cultural dimensions (i.e. self, family, friends and associates, and outsiders and foreigners); and four familial dimensions (i.e. face, filial piety, control, and nurture) that were seen to have implications for the students' identity development and achievement. In Back's subsequent paper (Back & Barker, 2002b), a concept of self was identified, described as Big Me and Little Me, which was found to be significant in explaining some of the underlying conflicts associated with identity development, in which family and society is known as Big Me or the greater self, and the more individual self is known as Little Me or the smaller self. This relationship is similar to that between collectivism and individualism. It is clear that Back carried out a thorough exploration of Chinese student identity; however the disparity of national identities amongst Chinese background students was not considered or examined in his studies.

Before presenting the aims of this study, it is important to restate that there has been no rigorous research conducted on the approaches to learning used by Chinese background students in Australian educational discourse. Awareness of the similarities and differences in their respective approaches to learning would help Chinese background students make the best of the advantages whilst avoiding the

disadvantages of various learning behaviours. It would also help Australian educators involved in teaching these groups of students to tailor their instruction methods to suit these students in order to improve teaching quality. Thus there is need to examine the approaches to learning used by Chinese background students from the above three nations and one single region, and their national identities.

1.3 Aims and objectives of this study

Against the background discussed, this research aims to uncover different Chinese nationals' approaches to learning with a view to enhancing their learning efficiency and informing approaches to Australian course design and delivery. The broader aim of this research is to explore the national identities of different Chinese background students from their own perspective and to look at the public perception and treatment of these students by the Australian government or public agencies. This study continues the exploration of Chinese background student approaches to study in light of such a debate in which Chinese background students are regarded as rote learners.

Based on the research background, the following Research Objectives were put forward:

- ***Research Objective 1:*** to identify and examine Chinese background students' learning approaches in Australian tertiary education discourse, by separately investigating motivation, self-related belief, learning strategies, and learning preferences;
- ***Research Objective 2:*** to explore the social, linguistic and educational factors affecting Chinese background students in their learning an Australian educational discourse;
- ***Research Objective 3:*** to pinpoint the educational and pedagogical implications for Australian tertiary institutions in dealing with Chinese background students? to devise some guiding principles for teachers who are or will be teaching Chinese background students at Australian universities;
- ***Research Objective 4:*** to explore the national identities perceived by the Chinese background students;

- ***Research Objective 5:*** to examine the Australian government 's treatment of different Chinese background students in its student entry processing;
- ***Research Objective 6:*** to examine the stereotype that Chinese background students are rote-learners.

1.4 Research questions

Following the Grotjahn paradigm (Nunan, 1994) this research work is framed within the sequence of 'exploratory – quantitative – interpretive': A non-experimental design was used: quantitative data was collected by way of questionnaires, and interpretive analysis was undertaken with transcription of interviews. The specific research questions are:

- ***Research question 1***: What are the generic situations of different Chinese ethnic students' (mainland Chinese, Chinese Malaysian, Chinese Singaporean, Hong Kong Chinese) learning approaches in Australian tertiary education, with regards to motivation, self-related belief, learning strategies, and learning preferences? In other words, how do the discourses of motivation, self-related belief, learning strategies, and learning preferences construct and affect these different Chinese nationals?
- ***Research question 2***: What are the social, linguistic and educational factors which affect Chinese background students in their learning an Australian educational discourse?
- ***Research question 3***: What are the educational and pedagogical implications for Australian tertiary institutions in dealing with Chinese background students?
- ***Research question 4:*** How do Chinese background students perceive their national identities?
- ***Research question 5***: How are the national characteristics and identities of these Chinese students perceived and treated by the Australian government?
- ***Research Question 6:*** Does the concept 'rote learner' apply to Chinese learners?

1.5 Research methodology

> Methodology refers to the choices we make about cases to study, methods of data gathering, forms of data analysis etc. in planning and executing a research study... in social research, methodologies may be defined 'very broadly' (e.g. qualitative and quantitative) . (Silverman, 2001 p. 4)

Denzin and Lincoln claim that qualitative research 'stress(es) the socially constructed nature of reality, the intimate relationship between the researcher and what is studied, and the situational constraints that shape inquiry... in contrast, quantitative studies emphasize the measurement and analysis of causal relationships between variables, not process (2003 p. 13).' However, it is obvious that each of these two methods has its own strengths and weaknesses. For the quantitative method, according to Burns (1994, p 9), provides answers which have a much firmer basis than the layperson's common sense or intuition or opinion. However, researchers are concerned that the scientific quantitative approach denigrates human individuality and ability to think. Its mechanistic ethos tends to exclude notions of freedom, choice and moral responsibility. The qualitative method is described 'like the nets of deep-sea explorers, qualitative studies may pull up unexpected and striking things for us to gaze on' (Barton & Lazarsfield, 1969, p. 166). The strength of the qualitative method is that the researcher gains an insider's view of the field on account of close association with both participants and activities within the setting; however it is not without problems as stated by Burns:

> Qualitative descriptions can play the important role of suggesting possible relationship(s), causes, effects, and even dynamic processes in school settings...The problem of adequate validity and reliability is a major criticism placed by quantitative researchers on qualitative methods. Because of the subjective nature of qualitative and its origin in single contexts, it is difficult to apply conventional standards of reliability and validity.(Burns, 1994 pp. 13-14)

For the purpose of the optimal display of Chinese background student approaches to learning, this study informs research methodology with both quantitative and qualitative methods in order to adopt the strong points of both methods and to minimise or offset their respective weaknesses. This is called methodological

triangulation (using different methods on the same object of study), and is characterised by a multi-method approach in contrast to a single-method approach (Denzin, 1970). 'The notion of triangulation bridges issues of reliability and validity...possibly has the most to offer' (Cohen, Manion, & Morrison, 2003 p. 114, 115).

The quantitative research in this study is based on empirical information collected through a questionnaire (a revised version of the OECD model). The qualitative research then adopts the method of interview for a deep understanding of human behaviour (Strauss & Corbin, 1990). Finally excerpts of responses from the questionnaire and at interview are compared to investigate the consistency with which the students respond to the same items in different situations.

In the interview, constructivist grounded theory will be employed as a major interpretive perspective with the aim of giving voice to the Chinese background students and reflecting the interactive nature of both the interviewer and the interviewee in conducting research into complex human issues (Charmaz, 2003c). The interview transcripts of individual interviewees will be analysed to identify students' views and explanations regarding their approaches to learning, and the foregoing theoretical approaches (Charmaz, 2003c; Glaser, 1998)will be used, offering opportunities for the students themselves to reveal what is important to them through the use of fairly open questions, from that locating their own interpretations on approaches to learning, firmly grounded in the data.

Critical discourse analysis will also be used to probe for the Australian government's perspective of Chinese background student national identities by examining an official DIMIA (Department of Immigration, Multicultural and Indigenous Affairs) document. This research focuses on an official policy relating to assessment levels in terms of financial proof for the processing of overseas student applications for Australian education. This part adheres to Critical Discourse Analysis (CDA) as employed by Van Dijk (1993; 1996)and Fairclough (1992; 1995), who point out CDA has been influential beyond the area of discourse as 'an explanation of how and why particular discourses are produced. Discourse is not only a product or reflection of social processes, but seen to contribute towards the production (or reproduction)

of these processes' (Teo, 2000). Gramsci (1971) and Althusser (1971, p168) have both stressed the significance of ideology for modern societies to sustain and reinforce their social structures and relations. 'As a pre-eminent manifestation of this socially constitutive ideology, language becomes the primary instrument through which ideology is transmitted, enacted and reproduced' (Foucault, 1972). Teo (2000) then states: 'thus, by analysing the linguistic structures and discourse strategies in the light of their interactional and wider social contexts, we can unlock the ideologies and recover the social meanings expressed in discourse'. Van Dijk (1993; 1996) and Fairclough (1992; 1995) share a common vision of the centrality of language as a means of social construction, and they embark upon various investigatory studies designed to unmask and make transparent the kind of socio-political or socio-cultural ideologies that have become entrenched and naturalised over time in discourse.

1.5.1 Method

Participants

Participants in the questionnaire were 179 on-campus Chinese background students enrolled at the University of Tasmania and La Trobe University. The students were from mainland China, Hong Kong, Malaysia, and Singapore. Students from Taiwan were not included, as there were too few to ensure comparability. The definition of Chinese background students used in this research derives from the Smith. (1998) study, which defines their Chinese sample as students of Chinese origin and who spoke a Chinese dialect as their mother tongue, and who were part of the Confucian Heritage Culture. Of the 179 Chinese background students, 85 were from mainland China, 49 from Malaysia, 22 from Hong Kong and 23 from Singapore. These numbers reflected the proportion of students from these countries studying in Australian universities, with mainland Chinese students accounting for nearly one fourth of the total overseas students in Australia (AEI-International Education Network, 2005). All participating university students had to indicate the length of their stay in Australia in order to explore the degree to which they were influenced by Australian education through their exposure to it. In this study, a vast majority of the participating Chinese background students were selected from University of Tasmania on account of OECD's findings that:

> differences between the characteristics of students as learners in different countries and between students in different schools within countries,

account for only a small part of the variation in approaches to learning. The most important source of this variation lies within schools, each of which contains stronger and weaker learners. (2003, p. 25)

Total numbers of participants at each stage are listed in Table 1 below:

Table 1: Source of participants at each phase of data collection

Data Collection		Aim	Participants
1	Responses to the revised PISA questionnaire	-to identify the responses of these students in terms of their motivation, learning strategies, self-beliefs, and learning preferences	179 students involving • 85 from mainland China • 49 from Malaysia • 22 from Hong Kong • 23 from Singapore
2	Interview	-to pursue in-depth information of students' approaches to learning and their national identities in the context of Australian educational discourse	12 from the total 179 students involving • 5 from mainland China • 3 from Malaysia • 2 from Hong Kong • 2 from Singapore

All participants, as university students, are aged 18 and over. Schneider (1997)states that by the age of 15, students' knowledge about their own learning and their ability to give valid answers to questionnaire items have developed considerably. While all tertiary students are over 17 years old, it can be assumed that we can gain a comparatively realistic picture of students' learning approaches from their self reports.

Measure and Procedures

A questionnaire and a semi-structured interview schedule were constructed for data collection in this study. 'A questionnaire is a self-report instrument used for gathering information about variables of interest to an investigator. It consists of a number of questions or items on paper that a respondent reads and answers' (Wolf, 1997, p. 422). A semi-structured interview has 'a specific interview schedule or none at all, an interview guide may be developed for some parts of the study in which without fixed wording or fixed ordering of questions, a direction is given to the

interview so that the content focuses on the crucial issues of the study' (Burns, 1991, p. 278-279). This permits greater flexibility than the close-ended type and permits a more valid response from the informant's perception of reality. The questionnaire assesses how Chinese background students self-report their approaches to learning. The interview schedule collects supplementary and explanatory information as a way of obtaining the students' own interpretations of their own approaches to learning that they have been experiencing, and the incidents, experiences and realisations that inform changes in their learning practices.

Basically, this research adopts the framework of the PISA survey as its questionnaire. Instead of thirteen characteristics of Chinese background students under four categories used by OECD, ten characteristics were selected and students were asked to answer several questions about each of them. The categories come under the four broad elements of motivation, self-related beliefs, learning strategies and learning preferences. Within the category of learning strategies, two characteristics are identified in this research, based on Weinstein's (1988) findings. These are organisational strategies and affective strategies. Therefore there are a total of twelve characteristics out of the four broad learning elements. Below are the descriptions of these definitions and references, giving the rationale for their selection, as well as examples of exactly what students were asked:

First, learning strategies are the plans students select to achieve their goals (Brown, Bransford, Ferrara, & Campione, 1983; Zimmerman & Martinez-Pons, 1990), including cognitive strategies and metacognitive strategies. Memorisation strategies, elaboration strategies as well as others, such as the ability to transfer information from one medium to another, make up cognitive strategies that are information processing skills. Memorisation strategies involve verbatim representations of knowledge stored in memory with little or no further processing, involving repetition aimed at literal reproduction, for example, 'When I study, I memorise as much as possible' (OECD, 2003). 'There are a number of different educational tasks that require simple recall. This is particularly true at the lower grade levels and in introductory courses at the postsecondary level' (Weinstein, 1988, p. 293). A major difference between experts and novices in many content areas appears to be related to the knowledge base that they possess (Chi, Feltovich, & Glaser, 1981; Gagne,

1985; Larkin, 1981), so this knowledge base is most important and the first step for expert decision making and problem solving. As Schmeck (1983) also notes, it may not be possible for even the highly intelligent students to engage in deeper forms of information processing until they acquire this knowledge base. However, the activities these students involved in seem particularly effective when they are provided further opportunities for more meaningful processing to take place, such as the use of elaboration, organisation or control.

While elaboration strategies are required to connect new material to prior learning, for example, 'When I study, I figure out how material fits in with what I have learned' (OECD, 2003). The major goal of each of these activities is to get the learner actively involved in building bridges between what the learner already knows and what he or she is trying to understand (Weinstein, 1988). Activities in this characteristic include creating analogies, paraphrasing, and using prior knowledge, experiences, attitudes, and beliefs to help make the new information more meaningful. The creation of effective elaborations requires that the learner be actively involved in processing the to-be-learned information. Trying to apply a principle to everyday experience; relating the content of one course to the content of another; relating what was presented earlier in a lecture to the current discussion; trying to use a problem-solving strategy in a new situation; summarising an argument: all of these are different ways to elaborate. By exploring how knowledge learned in other contexts relates to new material, students acquire greater understanding than through simple memorisation. Numerous studies have shown this to be an important prerequisite for meaningful learning, versus memorisation (Cermak & Craik, 1979; Entwistle & Ramsden, 1983c; Marton, 1988; Schmeck, 1988; Weinstein, 1982).

Metacognitive strategies imply conscious regulation of learning, thus also addressing control strategies (OECD, 2003). Metacognition is used to refer to individuals' knowledge about their own cognitive processes as well as their abilities to control these processes by organising, monitoring, and modifying them as a function of learning outcomes and feedback (Weinstein, 1988). Control strategies involve establishing learning goals, assessing the degree to which these goals are being met, and, if necessary, modifying the strategies being used to facilitate goal attainment.

These strategies are used to ensure one's learning goals are reached, to involve checking what one has learned and working out what one still needs to learn, allowing learners to adapt their learning to the task at hand. For instance, 'When I study I force myself to check to see if I remember what I have learned' (OECD, 2003).

In addition to the three foregoing learning strategies, this author also finds another two learning strategies originating from Weinstein's (1988) findings too important to be overlooked. These are organisational strategies and affective strategies. Organisational strategies focus on methods used to translate information into another form that will make it easier to understand. The facilitating effect is usually attributed to the processing involved in accomplishing the transformation as well as the structure imposed. In other words, an existing or created scheme is used to impose organisation on an otherwise unordered set of items. This strategy requires a more active role on the part of the learner than memorisation strategies. For example, one student tries to organise the material by certain characteristics.

Affective strategies are to help create and maintain suitable internal and external climates for learning (Dansereau et al., 1979; Weinstein, 1982). Although these strategies may not be directly responsible for knowledge or skill acquisition, they help to create a context in which affective learning can take place. Affective strategies are designed to help focus the limited processing capacity of human beings on learning goals. Eliminating both external and internal distractions contributes to enhanced attention and concentration. For example, when studying, one tries to find a quiet place to study. The ultimate goal for any of these activities is to enhance learning outcomes and performance.

The secondary category relates to motivational preferences and volition arising from motivation. Motivation can be regarded as the driving force behind learning. The motives deriving from external rewards for good performance such as praise or future prospects, are called instrumental motivation, such as "I study to get a job", and motives internally generated such as interest in subject areas are called interest in reading (Deci & Ryan, 1985; Schiefele, Krapp, & Winteler, 1992). For example, "When I read, I sometimes get totally absorbed". Volition is effort and persistence

shown immediately before and during the learning process (O'Neil & Herl, 1998). This is exemplified as "When studying, I put forth my best effort".

Within the third category of self-related beliefs, learners form views about their own competence and learning characteristics. These views have been shown to have considerable compact on the way they set goals, the strategies they use and their achievement (Zimmerman, 1999). Two ways of defining these beliefs are in terms of how well students think that they can handle even difficult tasks – self-efficacy (Bandura, 1994), for example, "I'm certain I can understand the most difficult material presented in readings" and in terms of their beliefs in their own abilities – self-concept (Marsh, 1993), e.g. "I learn things quickly in most subjects". In both cases, confidence in oneself has important benefits for motivation and for the way in which students approach learning tasks

Under the last category of learning situations, preferences, two other aspects of approaches to learning are taken into account: whether Chinese background students have preferences, respectively, for co-operative learning, for example, "I learn the most when I work with other students" or competitive learning, for example, "Trying to be better than others makes me work well". No one type of preference is superior, and preferences for the two types are not mutually exclusive. A good learner needs to be able to learn independently and in a group (Baumert, Fend, O'Neil, & Peschar, 1998). Strictly speaking, these two aspects do not directly relate to students' regulation of their own learning which was set as a primary goal of education by OECD.

To sum up, there are twelve characteristics of approaches to learning being investigated under four categories in this research. In this framework, memorisation, elaboration, organisational, control and affective strategies constitute learning strategies; instrumental motivation, interest in reading and effort and persistence make up motivational preferences, volition; self-efficacy and academic self-concept form self-related beliefs, and cooperative learning and competitive learning construct learning preferences. Student responses are used to score themselves on a scale rating the degree to which they have the relevant characteristics.

In summarising student responses to these questions, the researcher assigned each student a score for each of the twelve characteristics, indicating the strength of each learning attribute. In each case, this is measured on a scale constructed from the replies to three to five questions related to that characteristic. Each scale was constructed by giving students a score from 1 to 4 for different responses (higher numbers representing more positive responses) and taking a mean score for all the questions. For example, when asked about aspects of memorising material, a student might report two statements being true "sometimes" and two being true "often" – the middle two of the four frequency categories. This would result in a mean score of 2.5, which would be that student's score of memorisation. In the case of questions requiring agreement or disagreement, 2.5 represents a point of "neutrality", since responses 1 and 2 are negative (disagreement) and 3 and 4 are positive (agreement). In these cases students with above 2.5 can be said to have positive learning characteristics and those with below to have negative characteristics. For example, students with below 2.5 on the reading interest scale show an overall lack of interest in reading; those with below 2.5 on the three self-concept scales have a negative self-concept, i.e., lack confidence in their ability to master particular school tasks.

1.5.2 Data collection and analysis

After ethics approval and permission was obtained, data collection began with the revised OECD questionnaire as mentioned above. For better understanding, the questionnaire (see Appendix Table 2) is provided in English. In addition, the following generic information was also collected:

Nationality;
Gender;
Degree;
Course engaged;
Length of Stay (up to now);
English Proficiency including:
- Listening
- Speaking
- Reading
- Writing

The method used for the questionnaire data collection was conducted as follows: Lecturers of the targeted faculties of Business, and Science, Engineering & Technology at the University of Tasmania were contacted to ask for their permission to recruit students from their classes. If successful, the nature and purposes of the study were briefly introduced during the lectures and copies of the explanatory statements were administered. Then consent forms and questionnaires were given to those students who had indicated that they were interested in taking part in the study. They were requested to complete their questionnaires in class within 5 minutes, or complete them during their out of class time. The completed questionnaires would be collected at subsequent lectures over the following week of class.

Next, based on the data of questionnaire, some in-depth interviews were carried out to highlight potential subtleties and complexities in student responses. Students from the pool of participants who had agreed to be interviewed were randomly selected for interviewing. All the interviews took place within the university, and were audio-taped and transcribed. In the interview, the researcher's personal background was detailed because of the possibility that, if the participants were aware of the researcher's expertise or beliefs, they might omit relevant information presuming that it is known or irrelevant. The researcher's learning and cultural background as a Chinese background student will, however, likely help unearth some of the Chinese background students' unspoken thoughts.

Prior to the study, an exploratory interview was conducted by the researcher with teachers of Chinese background students, to get a sense of their situation from another perspective.

Finally, two classroom observations of 20 Chinese background students were conducted to verify the interpretation of their previous questionnaire and interview regarding these students' responses on their approaches to learning, compared with their classroom performance.

1.6 Ethical Issues

This study was conducted in compliance with the approved minimal risk application by the Human Research Ethics Committee at the University of Tasmania (Reference Number: H8827). The following considerations are described in this section.

The term 'Chinese' used here is ideologically neutral in case of any implicit issues. Prior to the investigation, the researcher was alert to the following phenomena. When talking with Chinese Singaporean students, it was interestingly perceived that they preferred to be called Singaporeans instead of 'Chinese', although both people talking knew that 'Chinese' under the dialogue context just referred to Chinese Singaporean. It was later demonstrated and realised in the research that they are proud of being westernised Singaporeans other than Chinese with an image of 'labour worker' in Singapore. This also occurred with Hong Kong students, although Hong Kong was handed back to China in 1997, they were very much unwilling to be addressed as 'Chinese' either in the classroom or outside. It is obvious that using the expression 'Chinese' or 'Chinese international students', might result in participants' discomfort. In light of the sensitiveness of the terms 'Chinese' or 'Chinese international students', the more neutral term 'Chinese background student' was employed in this research to ensure the participants were free to communicate with the researcher both in filling out the questionnaire and in conducting the interview.

The nature and the purpose of the research were sufficiently explained to participants, and they volunteered to participate in the survey. To ensure a clear understanding and interpretation of the nature and the purpose of the study, an information sheet and a consent form were presented to the participants before conducting the questionnaires and the interviews. General information about the research nature, purpose and ethical concerns was provided to the would-be participants before the researcher made contact with them to request their participation in the study. In regard to the interviews, participants were asked to read and fill out the consent form and their verbal agreement was sought.

In order to protect participants' confidentiality, the questionnaire was designed to be anonymous. Participants did not have to give their names or other information that could identify them. All the information collected, such as recorded tapes, was coded

and accessible only to the chief investigator and the researcher. Interview participants, were coded CM for male mainland Chinese student, CF for female mainland Chinese student, HM for male Hong Kong Chinese student, HF for female Hong Kong Chinese student, MM for male Malaysian Chinese student, MF for female Malaysian Chinese student, SM for male Singaporean Chinese student, and SF for female Singaporean Chinese student, in order to protect the informants' privacy rights. However the researcher was aware that the interview sometimes might be too personal and too detailed. Thus an opportunity was provided for participants to have free access to resources such as copies of the audio-tapes, entire information, report and thesis before publication and to remove any information with which they felt uncomfortable, inline with Seidman's recommendations (1998). In addition, all data sources (video and audio tapes, questionnaires etc) were kept securely stored during the research, and will be retained under lock and key in the School to which the researcher belongs for a period of at least 5 years after completion of the research. The researcher undertakes to use the data and information collected in the research only for the purposes of the research, to make no unauthorised disclosure of that data or information, and to maintain the anonymity of all participant data except pursuant to the express consent of the relevant participant(s).

Last but not least, the researcher's background cannot be overlooked. As a mainland Chinese student, the researcher's relevant knowledge and opinions were not supposed to be fully disclosed to the participants until the end of the interview. Even though the informants were expected to provide as full details as possible, they might have neglected something unspoken and/or not explained clearly, if they were aware of the researcher's expertise. Therefore, it was advisable to disclose as little as possible, the personal information of the researcher prior to and in the process of the interview. However, after the interview, the personal information and even personal views of the researcher on the study topics could be freely exchanged with the participant if he/she was still interested.

1.7 The significance of this study

From the theoretical viewpoint, this study has special significance because it extends the OECD model and its findings to Chinese background students for the first time. Based on the comprehensive literature review, all quantitative research on approaches to learning used by Chinese background students has used either the Approaches to Studying Inventory (Entwistle & Ramsden, 1983c), or the Study Process Questionnaire (Biggs, 1987b). A recent study conducted by the University of Oxford (Shale & Trigwell, 2004) pointed out a drawback in these assessment systems in that by confining their key approaches to learning, surface and deep, to inherent characteristics of different students is lack of persuasion. While as evidenced in Smith's study (2001), an argument that students are anxious about having more knowledge about approaches to learning was further supported. Thus a new set of measurement is needed. In addition, in the only comparative study of approaches to learning of Chinese background students conducted by Smith (2001), students from mainland China, who make up the majority of Chinese background students, were not covered. Consequently this research would contribute to literature on approaches to learning of Chinese background students with different nationalities and ethnicities in Australian tertiary education.

In order to better understand human behaviour, this research used both quantitative and qualitative methods, while other studies used only quantitative ones. Qualitative methods using perception and interpretation need to be adopted (Cook & Reichardt, 1979c). Therefore, a comparative study on approaches to learning used by Chinese background students with different nationalities and ethnicities also needs to be undertaken to provide different insights about this phenomenon.

In terms of practical implications, one first potential value of the present investigation is to add more knowledge about Chinese background student approaches to learning. This study can contribute its findings to an evolving interest in the remediation of learning deficits in academically under-prepared Chinese background students in Australian universities, by helping them identify their approaches to learning and realise which aspects of approaches to learning they need to change and in which way to best improve them.

The second potential value of the investigation is to inform knowledge on the methods of teaching diverse Chinese background students on multicultural campuses of Australian tertiary education. Smith (2001) indicated that teaching and support systems must reflect sensitivity to differences in learning behaviours of students. Gribble and Ziguras (2003) also found that there was a need for academics to appreciate national or ethnical, cultural, social, economic and legal contexts if they are to improve the effectiveness of their teaching in intercultural backgrounds. Of course, Australia is not an exception. The results of this research will help Australian universities, their faculties, staff and administrators at the post-secondary level to advance their teaching and learning environments by providing educators with a more holistic, cross-cultural picture of Chinese background students in Australian universities. Thus, it is important that Australian teachers are further informed about different Chinese nationals and their learning approaches in Australian universities. This research investigated whether Chinese background student approaches to learning can be distinguished on the basis of their different national groups. The basic rationale for the study is that the provision of tertiary education in Australia to Chinese background students with CHC will be more successful if the learning approaches adopted by students are taken into account in the design and delivery of courses.

This research has filled a gap in the literature of the national identities of Chinese background students. As only one study was conducted by Back in this research field (2001), this study helps these Chinese background students from mainland China, Hong Kong, Malaysia and Singapore to have explored their identities in their own, their peers' and the Australian federal government perspectives in order to improve better understanding themselves and one.

This research will, hopefully, bring to the research community some insights into Chinese background students and enable researchers to increase their understanding of distinctions among Chinese background student groups in Australian tertiary educational discourse. It also sets up a comprehensive and solid foundation for them to pursue any further investigations. It is also hoped that the thesis will contribute something meaningful to the reader's understanding of these issues.

Of course, Chinese background students from any particular country do not all study in the same way. However, I believe that there are sufficient commonalities among these Chinese background student groups and sufficient differences between nationalities that feature their approaches to learning.

1.8 Limitations of this study

It is undeniable that there is no research that is able to present precisely and absolutely the truth from the research. There are always some limitations here or there in a study, although some complementary designs could be made to reduce them to minimal scope. Some regrets remained when the study was completed due to accidental and irresistible external and internal forces before or during the research process. Therefore, the inevitable limitations of this research are elaborated in the following section.

Self-protection mentality led to the avoidance of any awkwardness and embarrassment in participants' expressions. It is the nature of human beings to avoid or disguise anything embarrassed to them. As Chinese background students, no matter which country they are from, the normal mentality was to show the sunny and positive side of their behaviour or activities for the sake of keeping their dignity or self-respect, especially in terms of national identity. Although they might disclose some of their shortages or bad experiences in recalling their approaches to learning and national identities, at the same time they would keep them in a proper degree to which their national identities would not have a really harmful damage. This mentality, of course, hindered obtainment of the inherent and intrinsic views of participants. Therefore in this study, critical discourse analysis was employed to probe for the essential characteristics of their learning approaches and national identities.

In terms of sources of the participants in this research, the scope of the selection of participants might be not wide enough. In this survey, a vast majority of them were from the University of Tasmania and a few from La Trobe University. These two participating universities are four-star and three-star universities, rating at the average level in all the universities in Australia. It would be more convincing if the participants were from one top university, one average university and one university

from the lowest ten with an equal proportion for each group. In addition, the research outcomes could also depend heavily upon the participants' personal backgrounds and unique perspectives. Even for mainland Chinese students, their personal backgrounds varied a great deal, let alone other national students growing up in multi-cultural countries or regions. Therefore, the results of the research might only give an indication of how differently these different groups of students approached their learning tasks and what the differences between their national identities might be.

Reflecting the varied levels of mastery of English amongst participants, some information was not expressed as accurately as would have been in their first languages ie. Mandarin or Cantonese. In general, all the participants were international students doing normal course work at the time when the research was conducted. This means that they all met the minimal requirements for entrance to the normal courses at universities set by the federal government, in other words, they generally had effective command of the language. However, because of disparity of their language backgrounds, some were excellent at English, such as Singaporean Chinese students, who could use subtle English. But others, such as Malaysian, Hong Kong and mainland Chinese students, by and large expressed themselves very well but occasionally came across a few difficulties in the subtlety of English expression. However this immediately gained support from the researcher. The reason for the abandonment of lexical selection for using two languages in the study is that each language has its own characteristics and uniqueness, so that many equivalent terms in one language cannot be found in or adequately translated into another.

In light of political correctness, the researcher, as a mainland Chinese student, is placed in a situation akin to being both a coach and a player in a football match, and might have had some subliminal misjudgement on the key research issues related to Chinese background students from other countries or regions. Political correctness, according to the Oxford Concise Dictionary, is described as the careful avoidance of forms of expression or action that are perceived to exclude or insult groups of people who are socially disadvantaged or discriminated against. In this study, political correctness might lead me to search for negative aspects of students from the other three nations and regions in order to protect the mainland Chinese profile; at the same time, merits of mainland Chinese students could be more easily spotted and expanded.

In spite of some inevitable limitations to the research, a careful design was made with every effort to keep these limitations to a minimum, in order to ensure the results of the research reached a high validity and reliability level, and eventually to gain the most significance and value in the respective research and practical fields.

1.9 The structure of the thesis

The comparative study of Chinese background student learning approaches is structured in seven chapters:

In Chapter 1, the Introduction, an overview is given of why, and how Chinese background students with different nationalities and ethnicities (from mainland China, Hong Kong, Malaysia, and Singapore) at Australian universities are measured, by providing a brief research background, justifying, creating research aims, objectives and questions, exploring the significance of this study, exploring the limitations and finally sketching the structure of the thesis.

In Chapter 2, the Literature Review – approaches to learning and national identities, existing research evidence is examined for the understanding, interpretation, justification and construction of the current study, in terms of both student learning approaches employed by Chinese background students from the above four countries and their national identities. In this chapter, the arguments of existing knowledge are discussed and evaluated; conflicting findings are reported across studies; the variations in the findings and possible explanations for them are carefully examined; the review is then organised according to the major points (chronologically) relevant to the research questions; some indications of the relative importance of results from studies reviewed are provided; most important points are reiterated according to the research objectives. This chapter is to assist readers to comprehend why this research was conducted.

In Chapter 3, National Background: background information of Chinese background students in their own countries or region of mainland China, Hong Kong, Malaysia, and Singapore is presented for further understanding of the differences in learning

approaches and national identities among them. As all Chinese students are framed under CHC (Confucian Heritage Culture) and the backgrounds of their own countries or region are regarded as a key factor to differentiate them, so ethnicity and individual family backgrounds are not considered in this study. However their own corresponding historical, socio-political, economic and educational contexts in which they were brought up and developed and which in turn has an important impact on their approaches to learning and national identities are introduced and elaborated. These beliefs, principles and theories developed in their own countries or regions have an important influence on their opportunities for success (Guild, 1998). This background information is to aid understanding of the formation process of their approaches to learning and national identities.

Chapter 4, Research Methodology describes the research design used. The theoretical framework of research is underpinned by triangulation methodology, in which both quantitative in the form of the revised OECD questionnaire, and qualitative methods in terms of interpretative interviews are explicated. Critical discourse analysis and constructive grounded theory are applied in qualitative interviews. The major parts of this chapter include the essence of the research; the methods and tools; the selection of certain terms and expressions; descriptions of the participants; the study period; and the pilot study.

Chapter 5 describes the analysis of the quantitative data collected from 179 revised OECD questionnaires. Quantitative data is analysed with SPSS which is a software package designed to analyse quantitative data. This chapter particularly focuses on the approaches to learning used by the four groups of Chinese background students in terms of learning strategies, motivation, self-related belief, and learning preference, in order to statistically quantify the differences.

Chapter 6 Qualitative Data Analysis describes the interpretation of the qualitative data collected from the interviews with 12 Chinese background students. Qualitative data is processed with NVivo and constructivist grounded theory. Approaches to learning and national identities are mainly focused on in this chapter with the hope of identifying some insightful ideas from the students' accounts.

Chapter 7 examines the national identities of Chinese background students as perceived and treated by the Australian government and displayed within visa documents. Some documents from DIMA will be selected and analysed by the methodology of critical discourse analysis in order to explore what different perceptions of the national identities of the four groups seem to be evident within the discourse of the Australian government, and to further reveal that prejudice is still imbedded within the educational discourse of Australia.

Chapter 8, the Conclusion begins with a review of the knowledge about the comparison of learning approaches and national identities presented by Chinese background students from mainland China, Hong Kong, Malaysia and Singapore in Australian tertiary education. It is followed by a discussion of the implication of this study. To synthesise the above tasks, each research objective to be later discussed in the other chapters is explored, and an in-depth scrutiny of those research objectives reveals implications for the research aims. Finally, some limitations are discussed and further research is also suggested.

1.10 Conclusion

By involving the two major purposes of identifying the differences in approaches to learning and national identities manifested in Chinese background students from mainland China, Hong Kong, Malaysia, and Singapore, a basic, clear but complete structure of the thesis was designed and presented in this Introduction Chapter. In the framework, the research background was first described, and then research questions and the research aim were stated, followed by the underpinning research methodology, the significance and limitations of this study were finally clarified.

Above all, the chapter presents the feasibility and significance of doing a comparative study on learning approaches and national identities of Chinese background students in Australian universities. The descriptions and analyses of these two themes are discussed phase by phase in the following chapters.

Chapter 2

Literature Review

2.1 Introduction

Golden-Biddle and Locke (1997) point out that the literature review has its own internal structure. It starts with introductory paragraphs; discusses the literature in a logical and coherent way; and concludes with paragraphs that relate the literature to the research project. In accordance with their structure, this chapter starts with an introduction section in which the scope of the literature review is defined; the organisational structure of the literature review is then outlined; finally the boundaries of it are delineated to clarify what other literature is beyond the scope of this research. In the body section, the two most important topics are focused upon while discussing prior research. These are approaches to learning; and Chinese background students' approaches to learning. The literature revolving around these two important topics is discussed, evaluated, summarised and related to this research project. In the last section – the conclusion, the most relevant points of each of the section summaries are highlighted, and then related back to the need for the research. Finally what these mean for the research design is also reiterated.

2.2 Background leading to literature review

The scope of the literature review is restricted to three aspects:

- general concepts of approaches to learning;
- the current status of approaches to learning employed by Chinese background students in Western countries with an emphasis on comparison of their differences among the students from four major sources: mainland China, Hong Kong, Singapore and Malaysia, and

- Chinese background students' identities in Australian education.

The search for this scope of literature was carefully designed and conducted within five fine parameters: language; place; time; source of materials, and scope of research field (Bell, 1987). Regarding language, English and Chinese academic publications were considered to provide the maximum potential for relevant information. When considering place, the language setting delimited its demographic scope in some English speaking countries such as the US, the UK, Australia, Canada and New Zealand in which Chinese background students pursue their overseas study. The time period was limited to materials published within the last forty years. Sources of material included all journals, books, and theses relevant to this research field, and almost all the well-known data bases were checked. For example: EdResearch Online – Search the data; Education Resources Information Centre (Eric); Current Contents Connect (ISI); CAB Abstracts; Journal Citation Reports; JSTOR; Web of Knowledge; INSPEC; British National Bibliography (BNB); British Humanities Index (BEI); APAF (Australian Public Affairs Fulltext); Austrom (Australian Social Science, Law and Education Database); the Australian Digital Theses Program; China Academic Journals (CAJ); Australian Education International (AEI) and www.cnki.net which is the most comprehensive Chinese language journals and theses data base in Peoples Republic of China. The scope for relevant literature was limited to tertiary education.

In this chapter the literature review is structured into the three most important topics. The first one is how approaches to learning were interpreted by prior researchers at the level of theory, together with the explication of some terminologies in which the concepts of self-regulated learning, approaches to learning, and some elements making up approaches to learning are illuminated in order to provide a clear understanding of the ongoing analysis and discussion on research issues based on these concepts. The second is at the practical level and concerns what approaches to learning are presented by Chinese background students in western educational settings by concentrating on comparison among these students from mainland China, Hong Kong, Singapore and Malaysia. In this section, information relating to Chinese background students' approaches to learning, such as Chinese culture and learning styles, is also reviewed as important factors affecting their approaches to learning. For the last topic, materials on national identities of Chinese background students are

collected and evaluated from the sources of previous studies and Australian government documents.

The boundaries set for the literature review are confined to concepts related to approaches to learning and the practices of approaches to learning of Chinese background students from mainland China, Hong Kong, Singapore and Malaysia. Any concepts irrelevant to approaches to learning and practices of approaches to learning adopted by students from countries other than mainland China, Hong Kong, Singapore and Malaysia are not covered in this literature review. Therefore, approaches to learning adopted by students in other countries such as the US, the UK and even non-Chinese Singaporeans and non-Chinese Malaysians are not included. Although the majority of Taiwan's population is Chinese, there are too few Taiwan Chinese students accessible to this researcher to ensure comparability. A study on Taiwanese students therefore is not included in this research. In addition national identities of Chinese background students in countries other than in Australia are not included in this literature review. As the research focuses only on the national identities of those Chinese students in Australia, where a specific educational setting of nation, their national identities have been developed and identified by the Australian government.

2.3 Approaches to learning

Prior to the definition of approaches to learning, it is important to know why approaches to learning are worth investigation by so many researchers and how approaches to learning are defined. In general, the term approaches to learning may take multiple meanings, including learning strategies, learning styles, study/learning skills or techniques. Firstly, it is useful to review the definitions of these terms by different authors. Learning strategies refer to students' self-generated thoughts, feelings, and actions, which are systematically oriented toward attainment of their goals (Barrell, 1995). Learning styles can be defined as a set of cognitive, emotional, characteristic and physiological factors that serve as relatively stable indicators of how a learner perceives, interacts with, and responds to the learning environment (Keefe, 1979). In other words, learning styles are different ways in which a person is situated in a learning context. Here we can see that a learning style refers to the

relationship between individuals and their ways of learning whereas learning strategies refer to attitudes and behavior that is oriented towards goals. Study/learning skills or techniques are strategies and methods of purposeful learning, usually centered on reading and writing (Smith, 1995). In terms of these explanations, there is some overlap, largely about learning strategies. Still, how did previous studies actually identify various components of learning approaches?

To explore this issue, the purpose of education must first be clarified. "Education systems aim to enable students to acquire knowledge and become capable, confident and enthusiastic learners (OECD, 2003, p. 8)". The OECD project indicates that the purpose of education is to develop self-regulated learners. Based on a broad literature on the effects of self-regulated learning including experimental research by Willoughby and Wood (1994), in research training by Roseshine and Meister (1994), and in systematic observation of students (Artelt, 2000), self-regulated learners are more likely to achieve specific learning goals. Then, how is self-regulated learning defined? Although definitions may vary slightly, it is generally understood as the way in which students may be involved in:

- *setting appropriate learning goals which guide the learning process;*
- *using appropriate knowledge and skills to direct learning;*
- *consciously selecting learning strategies appropriate to the task at hand; and*
- *being motivated to learn.* (OECD, 2003 p. 10)

The foregoing elaboration has revealed some underlying factors of effective approaches to learning including learning strategies, and motivation etc, which ultimately lead to self-regulated learning. Its significance could then be identified as, at school, students who have positive approaches to learning tend to enjoy good learning outcomes. Beyond school, people who have developed the ability and motivation to learn on their own initiative are well-placed to become lifelong learners.

Integral to a sound understanding of approaches to learning is firstly, clarity in terms of a surface approach and a deep approach to learning accepted by many researchers (Marton, 1988; Marton & Saljo, 1984; Weinstein, 1988). Marton (1988) described learning approaches as the way in which knowledge is learned. In particular, he

emphasised the relational nature of learning aspects between 'what is learned (the outcome or the result) and how it is learned (the act or the process)'. Marton distinguished the two levels of the learning process as a surface approach and a deep approach. The former leads to a learning outcome that is essentially a literal reproduction of the original words; moreover, the surface approach does not deal with information with any perception of its holistic structure, but instead deconstructs it into disconnected bits and pieces that are memorised by repetition. The latter, the deep approach, produces an outcome that represents the 'communicative intent' of the author, including perception of the holistic organisation of material studied by which the components of the learning outcome are systematically nested rather than simply being strung together sequentially. Marton further suggests that students taking a surface approach fail to derive full meaning, including implications and connections from information, because they fail to perceive the structure of information in the first place.

Biggs (1988) extended Marton's perspectives by using his Student Process Questionnaire. He presented an approach to learning as the interaction between learning styles and learning strategies. The former in his words are 'stable ways of approaching tasks that are characteristic of individuals' (p185), while the latter are 'ways of handling particular tasks' (p185). He further stressed that learning approaches 'refer to the learning processes that emerge from students' perceptions of the academic task, as influenced by their personal characteristics' (p185). He then postulated three major approaches to learning: surface, deep, and achieving. The first two approaches are identical with Marton's conceptions of them. Students adopting a surface approach are instrumentally or pragmatically motivated; for example, they are at university only to obtain a degree with minimal effort. These students tend to reproduce what are taught to be essentials as accurately as possible. Students with a deep approach hold an intrinsic interest in learning and are likely to adopt strategies to help satisfy their curiosity by searching for meaning inherent in the task. An achieving approach to learning built on this prior relevant research posits that a student adopting an achieving approach to learning tends to manifest his excellence compared to other students, especially by obtaining as high grades as possible. However later on, this distinction was challenged by Kember and Gow (1990) and Kember, Wong and Leung (1999) due to a nebulous difference between the deep approach and the achieving approach. Subsequently Biggs devised a shortened

version of the Student Process Questionnaire based on two factors (surface and deep) (Biggs et al., 2001).

In summary, the definition of approaches to learning first used by Marton then advanced by Biggs has a broader meaning which is inclusive of learning strategies and learning styles. As learning/study and skills/techniques are part of learning strategies, adopted by Smith (Smith, 1995), 'approaches to learning' warrant more attention as a key term in this study to explore how different Chinese background students from mainland China, Hong Kong, Singapore, and Malaysia approach their study in the Australian educational discourse in a broader sense. However, the transcripts of interviews conducted by the University of Oxford showed that the same students could adopt different approaches to learning at different times. That study then argued that the terms 'deep and surface learning' (Marton, 1988) often used to refer to students' learning were inappropriate. It further indicated that the terms of deep and surface refer not to students themselves but to the different approaches that they adopt, in others words, approaches to learning are not viewed as inherent characteristics of particular students but are adopted by students in response to their learning circumstances. The approach adopted is a manifestation of the intention that the student possesses at the time (Shale & Trigwell, 2004). Remarks attributing different approaches to learning to different students were unconvincing, even more so when used to refer to students with different nationalities or ethnicities. One example is that Chinese students are often regarded as rote learners, indicating that a surface approach is part of their attributes(Biggs, 1987b), although some theorists voice against it (Burns, 1991; Chalmers & Volet, 1997). Therefore, a more convincing definition to approaches to learning needs to be developed.

In 2000, the OECD instigated a wide range of surveys on approaches to learning (the Programme for International Student Assessment [PISA]) among 22 OECD countries and four non-OECD countries (Brazil, Latvia, Liechtenstein and the Russian Federation), looking at the learning strategies that students adopt, at their motivation, at their confidence in their own learning abilities, and their learning preferences. PISA is the product of a concerted effort by experts from the OECD and the four other countries, steered jointly by their governments, in the field of international comparative assessment of educational outcomes. Its framework and assessment instruments are the product of a multi-year development process and are adopted by

OECD member countries. PISA focuses on four aspects of approaches to learning, i.e. students' motivation, self-belief, use of various learning strategies, and their learning preferences, that together make it more likely that a student will become a confident and self-regulated learner (p.3). The PISA results confirm strong links between student approaches to learning and measurable student outcomes. For example, there are:

> ... strong links between students' tendency to control their own learning, by consciously monitoring progress towards personal goals, and their motivation and self-belief. This suggests that effective learning cannot simply be taught as a skill but also depends heavily on developing positive attitude. (OECD, 2003 p. 3)

The PISA results highlight the fact that students who have positive approaches to learning tend to enjoy more successful learning outcomes. It can be stated that the definition of approaches to learning introduced by the OECD encompasses more fields than the ones set by Marton and Biggs, with motivation, self-beliefs and learning preferences also being included in this broader view. This is the reason why the present study is based on the OECD model.

As alluded to earlier, self-belief, motivation and learning strategies have been the subject of policy discussion and practical operation for many years now. However, in the PISA research, an important question concerning the findings did not attract too much attention in many areas: to what extent are these findings related to Asian students (except South Korea which was the only Asian country in PISA) with unique educational and cultural backgrounds studying in western educational institutions? To what degree do they benefit Chinese background students who represent a majority of international students in Australia? These issues are considerably appealing to this researcher.

2.4 Approaches to learning of Chinese background students

Chinese students first started to venture into overseas education in the late nineteenth century (as cited in Stafford, 2004). Since then, thousands have launched their journeys abroad in the pursuit of western knowledge. In 2005, as cited by IDP

Education Australia Limited (IDP), 64% of international students in Australia are of Chinese nationalities or ethnicities, or from countries that share a common Confucian culture (as cited in Barron, 2005).

A careful literature review was conducted revealing some research on Chinese background students' learning in western education discourses. For example, Matthews (2001) dealt with a strong link between Confucian values and the learning behaviour of Chinese background students. Liang (2004), a Chinese PhD scholar, examined the academic adaptation of Chinese background students in Canada. In 2005, Barron conducted an evaluation of Chinese background students' learning styles and other learning issues and problems; in the same year Skyrme shed important light on Chinese background students' use of strategies and Zhang (2005) focused on Chinese students' experiences learning in Australia. However, all of these studies were conducted using the framework of Bigg's or Marton's theory (Biggs, 1988; Marton, 1988) on approaches to learning.

Although some studies have examined Chinese background student approaches to learning or learning experience in western educational settings (Back, 2001; Liang, 2004; Stafford, 2004; Zhang & Watkins, 2001; Zhang, 2005), very few comparative studies have shed light on the identification of differences in learning approaches between Chinese background students with different nationalities or ethnicities, i.e. from mainland China, Malaysia, Singapore, and Hong Kong. The vast majority of research carried out on the learning approaches of students with Confucian Heritage Culture (CHC) has regarded them as a homogeneous group and has not acknowledged the different ethnicities that are present among them. For example Biggs and Watkins confirmed 'our belief that our Hong Kong students indeed represent a general 'Chineseness', deriving from the Confucian heritage itself, that allow us to understand Chinese learner better, wherever they are in the world'(1996 p. 269). Snider (2005) identified international students from P.R.China, Singapore, Hong Kong, Taiwan, Malaysia, and Indonesia as Chinese; Barron (2005) also positioned Chinese background students with CHC from China, Japan, Korea, and Vietnam as an integrated parameter to measure; in Barker's PhD thesis (1993), a comparative study was designed between Australian and ethnic Chinese university students in Australia by also viewing students from Hong Kong, Malaysia and

Singapore as a unit. Of all the literature reviewed thus far there are only two comparative studies in this area. One was carried out by Duan (1997) focusing on what factors influenced international students from Hong Kong and Malaysia in selecting Australian universities, and which obviously does not relate to approaches to learning. The other one conducted in an empirical paradigm by Smith (2001) analysed the differences in learning approaches among different Chinese subgroups of Hong Kong, Singapore and Malaysia, based on Entwistle and Ramsden's Approaches to Studies (1973). Therefore, it is possible to see that, as yet, only one study has been conducted which is associated with Chinese student approaches to study or learning in the same Confucian culture but for different countries or regions. Notwithstanding, there are still a certain number of limitations in this study which need to be overcome by the following research.

Smith (2001) also pointed out that 'very little research has been conducted with Malaysian-Chinese whose ethnicity represents about 40% of the total population of Malaysia' (p. 431). Therefore, there is a lack of empirical evidence to show how strongly Confucian Heritage Culture is embraced by the Malaysian-Chinese. Being a minority group (albeit a large minority) it is highly possible that a 'cognitive transition' (Holt & Keats, 1992) effect has occurred among Malaysian-Chinese in that their value and belief systems have been influenced to some extent by those of the majority Malay ethnic group. Bahasa Malaysia or Malay is the language of instruction in Malaysia, the country's official language, whereas in both Hong Kong and Singapore (predominantly Chinese ethnicity) the language of instruction in schools is English (Renshaw & Volet, 1995). Renshaw and Volet pointed out that 96% of the Singaporean students tested reported English as their first language and English was commonly spoken in everyday social and business life. In Hong Kong, although English is the official medium of instruction as in Singapore, 'Chinglish' is more often the norm. In many tutorials and lectures in Hong Kong, the language used in instruction is often switched between English and Cantonese. This, together with the fact that English is hardly spoken outside school, would restrict students' experience in the use of English in Hong Kong (Biggs, 1990a). The mother tongue for approximately 96% of Hong Kong people is Cantonese (Biggs 1990b, p. 97). Unlike students from Hong Kong and Singapore where most students speak two languages (English and Chinese), the Malaysian Chinese students typically speak at least three languages – Bahasa Malaysia, Chinese and English. In contrast, it is quite

a simple case in mainland China that Mandarin is the only language of instruction in school and also the sole national language. As has been indicated, mainland Chinese, Malaysian-Chinese, Singaporean and Hong Kong students differ in their language experiences. Language has always played an important role in the formation and expression of national identity (Warschauer, 2000). The knowledge of the role of language in identity construction is becoming increasingly central in the modern world.

Back and Barker (Back & Barker, 2002a) stated that 'students from Confucian background cultures feature a wealth of subtle and pervasive thinking, derived from socialisation patterns...' It is commonly agreed that these students have some commonalities in learning. In counselling of Chinese students, it is also realized that while a core of 'Chineseness' seems to unite them, historical and socio-political differences, especially educational disparities, do exist among students from (p. 64).' Consequently, these differences will be embodied by different values and belief systems, and then they in turn impact on the ways of learning employed by these students. Therefore Back and Barker emphasised that 'even if students from Confucian-background cultures reveal impatience with some traditional concepts, certain key issues are not dismissed as easily (p. 64).'

There is sufficient evidence from the literature on learning approaches to suggest that different approaches result from different social and educational experiences (Riding & Sadler-Smith, 1997; Sternberg & Grigorenko, 1997; Vermunt, 1996). Chinese background students from different educational and social environments can thus be expected to have differences in their approaches to learning. It is useful to note Rizvi and Walsh's (1998) warning against fixed conceptualisation of cultural characteristics that may also apply within the Chinese background groups. Nevertheless, it is a fact that there has been little research comparing student learning approaches among different Chinese national groups that controls for social-political factors. It was only the Smith (2001) study that effectively controlled for nationalities of some Chinese background students, drawing their samples from a number of countries. However, his research also exposed some limitations that need to be remedied by further research. Firstly, mainland Chinese students, as a major component of Chinese background students, were not covered in his research. Secondly, in terms of methodology, a lack of qualitative methods in this study led to

weak interpretations of human behaviour. Lastly, Smith's research was based on the Approaches to Studying Inventory (Entwistle & Ramsden, 1983c) and the Study Process Questionnaire (Biggs, 1987b) which have dominated the research area of learning approaches for many years. However, a most recently and widely-accredited measure has attracted little attention of the researchers to issues of Chinese background students' learning approaches, which has been adopted by OECD countries across-the-board since 2000 but which has never gained the opportunity to be extended to Chinese background students. Examination of these groups of students representing a majority of international students in Australian educational exports is undoubtedly very valuable in further improving Australian international educational levels and then advancing its educational exports. Therefore, this research is hoped to fill this gap by investigating differences in the learning approaches of students from four Chinese national groups, i.e. mainland China, Hong Kong, Malaysia, and Singapore. The OECD model of approaches to learning consists of motivation, self-related beliefs, learning strategies, and learning preferences which are considerably different from the previous learning behavioural measures.

It is necessary to explain why the selection of these participants occurs in Australia rather than in their own respective countries. It is noticeable that the majority of Chinese students who undertook undergraduate or graduate courses during the 19th and 20th centuries were good-performing learners, as in order to gain entry to courses, these students had to go through the competition and selection process of the Chinese education system, while government scholars also had to undergo competitive examinations (Wang, 1966). Having already demonstrated their ability to succeed, the success of these groups upon their return was unsurprising. Rather than undertaking overseas study consequent to proven academic success, however, some current mainland Chinese students in Australia may be here precisely because they are unable to compete in China's education system. For those who struggle in China's competitive examinations, studying overseas can be seen as a less painful way of gaining entrance into an overseas university, especially in high school education (Hai, 2001). However, the situation seems much more complicated amongst Chinese background students within postgraduate programs in Australia. Statistics of the Chinese government for 2004 show that only 3% of overseas Chinese background students are sponsored by the nation and 6% of them are

sponsored by corporate organisations; therefore 91% are full-fee paying students. This differs greatly from previous generations who were mostly funded by the Chinese government. Thereby, on one hand, as has been highlighted, some students enrolled in Australian graduate programs might want to avoid competitive postgraduate admission exams in China, some were even unqualified to attend these exams in China, for example, students holding three-year diploma are not eligible to apply for postgraduate programs in China yet are allowed to undertake Masters programs in Australia on account of different educational systems that give equivalence between a three-year Australian bachelor degree and a three-year Chinese diploma. On the other hand, a lot of Chinese undergraduates who are not content with knowledge informed through the old Chinese educational system come in the pursuit of overseas educational value. Whilst completing their studies at Chinese universities they enthusiastically subscribe to overseas education journals, some of which even offer scholarships. Therefore mainland Chinese students studying in Australian postgraduate courses are a specially constituted group whose features are distinguished considerably from general Chinese students of the equivalent level in mainland China. It is similar in the cases of Hong Kong, Malaysian and Singaporean international students. That is why this research, in order to identify learning characteristics of Chinese background students, focuses on Chinese students in Australia, rather than those in mainland China, and other respective countries or regions.

Smith's study has shown differences between the three national groups of Chinese learners, so that considerable care needs to be taken to ensure results from one group are not necessarily generalised to others. This study is the only one related to differences between Chinese students from different nations and regions, therefore more research needs to be carried out to substantiate its findings.

It is helpful to have a clear description of the literature reviewed on approaches to learning of Chinese background students by encapsulating them in one form, in which key priori studies closely associated with approaches to learning of Chinese background students are categorised under some key factors of research focus, research methodology, and research findings. In addition, implications for this study have been identified; these have been included in Table 1 in an attempt to provide

some benchmarks on which major arguments of this research are built. See Appendix 2: Key relevant literature reviewed on culture, identity, approaches to learning, and learning processes of Chinese background students are categorised below for reader-friendly purposes.

Despite a great deal of research related to Chinese background students, as yet there has been no comparative study among all of the major Chinese background student subgroups, for example: from mainland China, Malaysia, Hong Kong and Singapore. Smith's study (2001) has shown that differences between three national groups of Chinese learners (Malaysia, Singapore and Hong Kong) can be identified, such that considerable care needs to be taken to ensure results from one group are not necessarily generalised to others. Based on the differences in learning approaches noted among the different Chinese subgroups, caution must therefore be taken against forming fixed conceptualisations of cultural characteristics and considerable care must be given to sample definition and selection in cross-cultural research. Because there has been only one study done in the area related to diversity between Chinese background students from different nations and regions, more research therefore needs to be carried out to substantiate its findings. Therefore, this research will fill the gap in integral literature on Chinese background students with different nationalities and ethnicities at one Australian university.

2.5 National identities of Chinese background students

As yet, there has been no research conducted on the issue of national identities of Chinese background students, by perusing all the sources mentioned above. Many people have been aware of a phenomenon that when seeing a Chinese looking student in a street in Australia one can immediately tell who is from mainland China, Hong Kong, Singapore or Japan, Korea. It is important to recognise that different national students may differ in the ways they manifest; however, it is equally important to investigate the reasons for these differences. Researchers have found that different countries have different, culturally influenced, value systems (Hofstede, 1980, 1997; Schwartz, 1992, 1994). Although traditionally Chinese ethnic people are coupled with Confucian Heritage Culture, diversified historical and social-political systems among these four countries and regions, even allowing for

some with multicultural social contexts, make their nationals greatly vary from each other. However, in practice, such an investigation has been overlooked so far.

Back (2001) noticed Chinese identity, rigorously speaking, the identity of Chineseness. In his research conducted of 'Issues of Identity and Control for Chinese Students in Australia', Chinese identity falls into two dimensions: cultural dimensions and familial dimensions. Respectively, cultural dimensions consist of self, family, friends and associates, and outsiders and foreigners and familial dimensions make up of face, filial piety, control, and nurture. In 2002, Back (2002b) further created notions of Big Me for family and society or the greater self, and Little Me for the more individual self, representing the relationship of collectivism and individualism. However, national identities of Chinese background students were not touched. Another researcher, Mobo Gao (1998), in his paper 'Influence of Native Culture and Language on Intercultural communication', dealt with how Chinese immigrants identify themselves with the host mainstream values, with a conclusion of having not much of a self-identity. Obviously his study is not contiguous to national identities of Chinese background students either.

Seen in this light, following a considerable review of the literature on national identities of Chinese background students, the conclusion is that no study on this issue has been carried out.

2.6 Conclusion

A considerable review of the literature of past decades has resulted in three main conclusions. First, the previous research is much more a matter of how Chinese background students approach their learning than it is of comparing differences of their learning approaches. Only one relevant study on comparison of approaches to learning used by Chinese background students was reviewed, revealing that it excluded mainland Chinese background students, the major source of these students. This makes the case that the research area reviewed is incomplete and requires extension. This also establishes the need for research in this area.

Second, the theory of approaches to learning defined by Marton as surface and deep approaches, and extended by Biggs to be surface, deep and achievement learning strategy needs upgrading to the OECD model. Although Marton and Biggs' theory has been used over a long period of time, the Oxford University investigation indicated that approaches to learning cannot be attributed to students but instead are approaches that depend on student's perception of the learning tasks. The OECD model, a new measurement invented by a pool of experts from many countries, has been adopted by the governments of 26 countries', with no other models including SPQ being so widely adopted. This is the right reason to apply it to this research.

Third, the review also showed clearly that there has been no research conducted on national identity of Chinese background students in Australia, while self-related beliefs and motivation, as parts of the attributes of national identity, are highly related to approaches to learning. When individuals understand more about themselves, they are able to produce at higher levels.

To sum up, it is necessary and important to identify the difference of approaches to learning used by Chinese background students in Australian educational discourse and to explore their national identities. Educators should pay more attention to both similarities and subtle differences between students from different cultures or countries, rather than assuming that students from certain cultures or countries behave in certain ways. Understanding the diversity of Chinese background student groups may provide educators with insights into students' learning behaviours both across country within CHC, and into individual group students' learning needs. Such information can help teachers teach more effectively.

Chapter 3

National Background

3.1 Introduction

Although a similar culture (CHC) is shared by Chinese background students from mainland China, Hong Kong, Malaysia and Singapore, any common culture cannot be authentically understood detachedly from its sociological settings (Guibemau & Goldblatt, 2000). The importance of situating these students in a social and educational background is considerably underscored in this study. It is important to provide some background, educationally, socially and linguistically, to facilitate the understanding of the backgrounds in which these students come to Australia stereotypically as 'Chinese students'. This chapter is not a part of the critical review which normally provides research evidence to support a critical discussion. Thus the chapter aims to introduce the national profiles of the participants in terms of their social and educational backgrounds to enable a better understanding of the differences of approaches to learning they adopt and their national identities.

There is sufficient evidence from the literature on learning approaches to suggest that different approaches result from different social and educational experiences (Riding & Sadler-Smith, 1997; Sternberg & Grigorenko, 1997; Vermunt, 1996). Consequently, sociological diversity has an impact on the selection of students' approaches to learning, which also helps develop a specific national identity. Therefore, it is necessary to delve a little more deeply into the different social and educational backgrounds the participants in this study grew up in. Although it is with a full awareness that education is part of social science, which has a more direct influence on students' approaches to learning, this study juxtaposes education with

social background as two separate factors for the purpose of better understanding factors functioning in students' approaches to learning and their national identities.

Identity is itself at the very heart of what language is about, how it operates, how it came into existence and evolved as it did, how it is learned and how it is used, every day, by every user, every time it is used. It has long been apparent that a national language is highly related to the establishment of a national identity (Joseph, 2004). Anderson (1991) popularised the idea that the language is the bedrock on which the fiction of the nation is built, which also implies a substantial link between language and nation. It is because speakers and writers inherently know this that both the form and content of linguistic production are shaped, and frequently driven, by the imperatives of national identity. Comprehension and interpretation too are shaped and frequently driven by the perception of national identity. Although Chinese is the mother tongue of Chinese background students, English is both the official and everyday language for Singaporean Chinese. Malay, Chinese and English are also used by Malaysian Chinese students; however the overall English proficiency in Hong Kong is much higher than that in mainland China. According to Joseph and Anderson's theories, diversity of language backgrounds undoubtedly plays a part in the forming of respective national identities. In the same way, respective national identities would also affect the cognition of the use of language, and further on the comprehension and interpretation on learning issues.

This chapter describes firstly the social and educational backgrounds these students were brought up in and from which their respective approaches to learning originated and in which their national identities were developed. Secondly, their educational backgrounds will be described, in particular some policies that were crucial to their decision-making for venturing into overseas education, in order to explain why Chinese background students overseas are different from those studying in their own countries. Thirdly, the cohesion that unites Chinese background students together, the Chinese culture, is briefly introduced in order to be clarify their commonalities, while exploring their disparities; finally some discussions will be conducted about their distinctive sociological settings.

3.2 *Social-political and economical Backgrounds*

3.2.1 Of mainland Chinese students

China is one of the world's oldest civilizations with a history chronicled over more than 5,000 years. China has progressed through a long history consisting initially of primitive society, then successively through a society based on slavery, followed by a feudal society, then a semi-feudal semi-colonial society until the present socialist society.

In 221 BC, Qinshihuang established the Qin Dynasty, the first feudal autocracy in Chinese history, thereby beginning a 2,000-year period of feudalism which was to last through a succession of dynasties such as the Han, Tang, Song, Yuan, Ming and Qing, a period which finally met its demise in the bourgeois democratic Revolution of 1911 lead by Dr. Sun Yat-sen. October 1, 1949 saw the founding of the People's Republic of China.. By the time things started to stabilize, the regime was extremely popular as a) it was less corrupt than almost any government or army in the history of China, and b) the land reforms it had carried out over the previous two decades were fair and successful. The Fifties went as well as could be expected. Between 1966 and 1976 was the ten year period of the Cultural Revolution when the whole country went in chaos. The fabric of society was shredded as campaign after campaign dismantled the education system, every major social bond (parent-child, teacher-student, co-worker, neighbor, employer-employee, etc), and destroyed basic human dignity. The modern attitude is to try and forget it ever happened, but the psychic debris is still lying in plain sight. The Cultural Revolution also left more serious, longer-term legacies. One of them is that the traditional culture was deconstructed. Since 1979, China has moved away from Communism as a social system in favor of simple authoritarianism. (Aufrecht, 2004)

Politically, the PRC is a one-party ruled socialist country, thereby creating a single centralized locus of power. No substantial political opposition groups exist. The eight registered minor parties have existed since before 1950. These parties all formally accept the leadership of the Communist Party of China. Western democracy so far has little influence on its political system and its people.
China is a multinational country, with a population composed of a large number of different ethnic and linguistic groups. The basic classification of the population is not

so much ethnic as linguistic. The Han (Chinese), the largest group, outnumber the minority groups or minority nationalities in every province or autonomous region except Tibet and Sinkiang. The Han, therefore, form the great homogeneous mass of the Chinese people, sharing the same culture, the same traditions, and the same written language. Some 55 minority groups are spread over approximately three-fifths of the total area of the country. By far the most important Chinese tongue is Mandarin, meaning "ordinary language" or "common language."
Economically, throughout most of the nineteenth and twentieth centuries, as during much of earlier Chinese history, the economy was barely able to meet the basic needs of the country's huge population--the largest in the world. Before 1949 such conditions often led to starvation on a vast scale. Under the government of the People's Republic of China, food shortages were countered by redistributing supplies within China and by importing grain from abroad, which successfully averted famine except in the catastrophic years of 1959, 1960, and 1961. Since 1978, the Chinese government has been reforming its economy from a traditionally rigid communist economy to a more market-oriented economy but still within the political framework, provided by the Communist Party of China, and the economy has grown and living standards have risen constantly and rapidly. In 2005, the economy of the People's Republic of China was the second largest in the world but GDP per capita is still very low

3.2.2 Of Hong Kong Chinese students

The Cantonese began to settle in Hong Kong about 100 BC. After the first Opium War (1839–42), Hong Kong Island was ceded to Britain. In December 1941, the Japanese attacked and occupied Hong Kong. In 1945, the Japanese surrendered and Hong Kong was regained by Britain. On July 1, 1997, Hong Kong was returned to Chinese control, when the sovereignty of Hong Kong was transferred to the People's Republic of China (PRC), ending more than 150 years of British colonial control. Hong Kong is a Special Administrative Region (SAR) of the PRC with a high degree of autonomy in all matters except foreign and defense affairs. The government is economically very liberal and is rather democratic but with limited suffrage for special elections.

In population, the great majority of people in Hong Kong are Chinese by place of origin, non-Chinese making up only about 2 percent of the total. Non-Chinese groups

In population, the great majority of people in Hong Kong are Chinese by place of origin, non-Chinese making up only about 2 percent of the total. Non-Chinese groups are split fairly evenly between non-Asians and Asians. British, Americans, Australians, Canadians, and New Zealanders are among the non-Asians, while the Asian minority groups include Japanese, Indians, Pakistanis, and Singaporeans. Chinese and English are both official languages. Chinese, especially Cantonese in the spoken form, is the common language, however, and is almost universally understood. A variety of dialects and other languages are used among the ethnic minorities. The religious persuasions of the people of Hong Kong are as varied as their languages and dialects. Among the Chinese, followers of Buddhism and Taoism by far outnumber other groups, and the numerous Buddhist and Taoist temples and monasteries, some centuries old, play an important role in the daily life of the average Chinese. Christians constitute some half-million people, divided roughly equally between Roman Catholics and some 50 Protestant denominations and sects such as Anglican, Baptist, Lutheran, and Methodist. There are also small numbers of Muslims, Hindus, Sikhs, and Jews. Hong Kong has truly a mixed culture (Britannica Online, 2006b).

Hong Kong developed initially on the basis of its excellent natural harbour (its Chinese name means "fragrant harbor"). With its limited natural resources, Hong Kong depends on imports for virtually all of its requirements, including raw materials, food and other consumer goods, capital goods, and fuel. Indeed, even water has been in serious short supply. In the late 19th century and early 20th centuries, Hong Kong developed as a warehousing and distribution centre for U.K. trade with southern China. After World War II, Hong Kong became an economic success and a centre of manufacturing, commerce, finance, and tourism. High levels of life expectancy, literacy, per capita income, and other socioeconomic measures attest to Hong Kong's achievements over the last five decades. Hong Kong is one of the world's most open and dynamic economies.

3.2.3 Of Chinese Singaporean students

Singapore was formerly a British colony for over 140 years, but is now a parliamentary democracy led by the People's Action Party (PAP). In 1819, Singapore was ceded to the British East India Company and was soon brought under

the control of the British government, which surrendered to the Japanese in 1942, but regained control in 1945. Singapore briefly became part of the Federation of Malaya, Sarawak and Borneo (Sabah) in 1963, but achieved full independence in 1965. Since then the PAP has dominated politics in the country. The success of the PAP has been founded on a combination of rapid economic growth and an ability to restrict any expansion that supports the weak and divided opposition parties. The obvious Chinese dominance of the government is ongoing (EIU, 2005).

The Singaporean population is 3.5 million. The population of Singapore is diverse, the result of considerable past immigration. Chinese predominate, making up more than three-fourths of the total (in mid 2004 Chinese accounted for 76%). Malays are the next largest ethnic group, and Indians the third. Because of this ethnic diversity, no fewer than four official languages are recognised—English, Mandarin Chinese, Malay, and Tamil. English remains the main medium for administration, commerce, and industry, and it is the primary language of instruction in schools. Mandarin, the official language of China, transcends dialect barriers, and its use is strongly promoted; one-third of the school population is taught in that language. Religious affiliations reflect ethnic patterns. About two-thirds of all Chinese profess some degree of attachment to Confucianism, Buddhism, or Taoism or to some combination thereof. Virtually all Malays, and some Indians, adhere to Islam, which is the formal religion of about one-sixth of the population. The Christian community has grown rapidly and now constitutes more than 10 percent of the population; nearly all Christians are Chinese. Almost all of the remaining population is Hindu (Britannica Online, 2006b).

Singapore has few natural resources, there are no natural forests remaining on the island and the economy depends heavily on exports, particularly on manufacturing. However, through the development of last four decades, Singapore has become the most advanced economy in Southeast Asia and is often mentioned along with other rapidly industrialising countries and regions in Asia, notably South Korea and Taiwan. Singapore, a highly developed and successful free market economy, enjoys a remarkably open and corruption-free environment, stable prices, and a high per capita GDP.

3.2.4 Of Chinese Malaysian students

The history of the Malaysian area can be seen as four successive phases of outside influence, followed by the final assertion of Malay independence. The first phase saw the domination of Hindu culture imported from India from the 7th to the 14th centuries. The second phase began with the arrival of Islam, which happened in the 10th century, and led to the conversion of most of the Malay-Indonesian world. Islamic culture has had a profound influence on the Malay peoples, but has also been influenced by them. The third phase was the intrusion into the area of the European colonial powers: first the Portuguese in 1511, then the Dutch and finally the British. European domination led to the fourth phase of foreign influence: the mass immigration of Chinese and Indian workers to meet the needs of the colonial economy created by the British in the Malay Peninsula and North Borneo. The Chinese and Indians posed a profound threat to the Malays, dominating economic life and the professions, and at one time threatening to make the Malays a minority in their own country. British power in East Asia was fatally damaged by the Japanese occupation of the region in 1942-45. In 1963 Malaya became Malaysia, a federal constitutional monarchy with a non-political head of state, with the acquisition of the British territories in North Borneo and Singapore. Malaysian political life is dominated by the National Front (Barisan Nasional), a broad coalition of ethnically oriented parties that long has been controlled by the United Malays National Organisation.

The Chinese-majority Singapore and the Federation decided to part ways in 1965. Since 1970 the United Malays National Organisation (UMNO) has ruled Malaysia almost as a one-party state, co-opting the Chinese and Indian leaderships through the device of the "National Front coalition." Malaysia under UMNO rule has prospered mightily, reaching close to "first world" living standards by the 1990s. The main opposition parties are the Democratic Action Party (consisting primarily of Chinese), the Muslim Unity Movement (a coalition of pro-Islamic parties), and the Sabah People's Union. This growing prosperity has helped minimise political discontent, but has masked a decisive shift of power in favour of the Malays. Successive UMNO governments have been determined to break the Chinese domination of the economy and the Indian domination of the professions, and to create Malay business and professional classes. This has been achieved by imposing the Malay language on the education system and through systematic discrimination in favour of Malays. These

measures have caused great resentment, but the results have been the creation of a more genuinely integrated and multi-cultural society (Wikipedia, 2006c).

Malaysia's economy, known as the New Economic Policy (NEP), has been transformed since 1970 from one based primarily on the export of raw materials (rubber and tin) to an export-oriented manufacturing one that is among the strongest, most diversified, and fastest-growing economy in Southeast Asia. Traditionally, the Malaysian economy has been dominated by the country's Chinese and South Asian minorities. The goal of the NEP has been to endow the Malays and other indigenous groups with greater economic opportunities and to develop their management and entrepreneurial skills.

The population in Malaysia shows great ethnic, linguistic, cultural, and religious diversity. A significant distinction is made between indigenous peoples (aborigines and Malays, collectively often called bumiputra) and immigrants (primarily Chinese and South Asians). In addition, there are important differences among the indigenous peoples themselves and among religious groups. In general, there are four groups of people, given in order of their appearance on the peninsula: the Orang Asli (aborigines), the Malays, the Chinese, and the South Asians. In addition, there are small numbers of Europeans, Americans, Eurasians, Arabs, and Thai. The Orang Asli constitutes the smallest group. They are primarily adherents of traditional religions, but a number have converted to Islam. The Malays constitute about two-thirds of the population and are politically the most important group. They share with each other a common culture, speak a common Austronesian language—Malay (officially called Bahasa Malaysia), which is the national language—and are overwhelmingly Muslim. The Chinese, who make up about one-third of the peninsular population, originally migrated from southeastern China. They are ethnically homogeneous but are less homogeneous than the Malays in language and religion. Several different dialects are spoken, notably Hokkien, Cantonese, Hakka, and Hainanese. Thus, it may be necessary for two Chinese to converse in Mandarin Chinese, English, or Malay. The Chinese do not have a dominant religion; most of them, while subscribing to Confucian moral precepts, are either Buddhist or Taoist. A small minority is Christian. The peoples from South Asia—Indians, Pakistanis, and Tamils from Sri Lanka—constitute about 10 percent of the population of

Peninsular Malaysia. Linguistically, they can be subdivided into speakers of Dravidian languages (Tamil, Telugu, Malayalam, and others) and speakers of Indo-European languages (PunjaGi, Bengali, Pashto, and Sinhalese). Numerically, the Tamil speakers are the largest group. Most of the Indians and Sri Lankans is Hindu, while the Pakistanis are predominantly Muslim. Some Indians have been converted to Christianity. The Sikhs, from the Punjab, adhere to their own religion, Sikhism.

Malaysia is a melting pot of several major cultural traditions that stem from archipelagic Southeast Asia as well as from China, South Asia, the Middle East, and the West. Malay culture and Bornean culture are indigenous to the area. Chinese cultural influence has consequently been minimal. The Chinese immigrants themselves, moreover, did not form a homogeneous group. Their culture in Malaysia has its roots in the culture and civilisation of pre-revolutionary China, with modifications brought about by local circumstances and environment.
Most of the Indians and Pakistanis originally came as labourers to work in the coffee and rubber plantations. Like the Chinese, they also were mainly transients (until World War II), living in closed communities and remaining virtually unassimilated. The communities of Malaysia have been affected by British colonial rule and Western cultural influences, especially in education and institutional forms (Britannica Online, 2006a).

3.3 Educational background

3.3.1 Of mainland Chinese students

The educational system in China is a major vehicle for both inculcating values in and teaching needed skills to its people. Traditional Chinese culture attached great importance to education as a means of enhancing a person's worth and career. Since 1986, China has adopted the education policy of "nine-year compulsory schooling system", which means all children are required to attend schools for at least nine years. During the period, students will finish both the primary school program and the junior middle-school program. For higher education, students must pass examinations at all levels. First, one needs to pass the entrance examination for senior secondary schools or secondary-level technical schools. Then after two or

three years, one may sit for the national college entrance examination. English has special emphasis as a compulsory subject in all middle schools. In recent years, English has been brought forward to Year 4 in primary schools, even to Year 1 in some cities. Educators of all levels attach great importance to the teaching of English---the official second language. However, through many years' learning, the acquisition of English by mainland Chinese still remains in written form, although a number of educational reforms have been carried out to highlight the communicative function of English, its pragmatism. The title of 'dumb' and 'deaf' English has been given to mainland Chinese students.

The Chinese educational system is a highly competitive educational system. Because of the huge population waiting to be educated, and the limited space in colleges and universities, entrance to higher educational institutions needs to be very competitive. The most important thing for students is the preparation for the National College Entrance Examination, known as Gāokǎo in Mandarin Chinese. It is an academic examination held annually in the mainland of the People's Republic of China. The examination is essentially the only criteria for college admissions. If you can survive the examinations you will become a 'white collar' worker; if you fail, you will become 'blue collar'. All study in primary and secondary schools is focused on that college examination. Students hoping to attend college will spend most of their waking moments studying. Fear of the test is such that students who can afford to will often go abroad for college (Ministry of Education of the People's Republic of China, 2004). Some critics point out that the examination is basically a test of how much knowledge a student has been able to memorize in his/her years at school. Critical thinking is rarely emphasized in the Chinese classroom, a legacy of Confucianism. The education system in mainland China has sometimes been criticized for its emphasis on rote learning.

Because of the drastic competitiveness in the National College Entrance Examination, and the rapid economical development of China over last twenty years, the composition of mainland Chinese students studying overseas has changed considerably. In the early stage of China's economical reform back in 1978, most mainland Chinese students were not self-funded, as very few Chinese families had the financial capacity to support their children studying abroad at that time. Among those who were lucky to be self-funded, sponsorship from foreign universities and

institutes was their major source of funding; only a few of those came from senior official's family or gained foreign relatives' support. Yao (2004) has commented that among 50 thousand Chinese students going overseas between 1978 and 1987, only one fifth were self-supported students. With the further development of China's economy, an increasing number of Chinese families could afford for their children to pursue western education abroad. By 2002, 94% of the total overseas mainland Chinese students were self-funded and this trend has remained since then indicating that self-funded mainland Chinese students have dominated the Chinese studying overseas market (Yao, 2004). Non-self-funded mainland Chinese students, most of whom were visiting scholars aiming at broadening their vision and improving their academic levels, are mostly engaged in non-degree courses. Rigorously speaking, they are thus not overseas Chinese students. This study focuses on Chinese overseas students who are self-funded (including by scholarships) not on visiting scholars who are financed by the government or cooperates. Next we shall look into the changes in the composition of these self-funded Chinese students studying overseas over the last five years.

After the September 11, terrorist attacks in the USA many excellent Chinese students changed their destination for overseas education from America to Australia because of the tightening of US visa processing in view of security issues, and because of the rising reputation of Australian education throughout the world. However, most of these students concentrated on research Masters and PhD degrees, usually with scholarships. These Chinese students only accounted for a small proportion of the overall Chinese overseas students, as it is very difficult to win Australian scholarships. In addition to general Chinese university graduates who wanted to pursue advanced western knowledge and critical thinking, a new phenomenon came into existence. This was that some Chinese senior high school students, in order to avoid the formidable competition in the National College Entrance Examination (Gāokǎo), embarked on travel to Australia for their college education in order to benefit from the low threshold entry to tertiary education in Australia. It was easily inferred and also soon testified by the fact that most of these were under-achieving students who could hardly qualify to get into good universities in China, or even into any university. Thus, some students, who were not qualified for entry into Masters Programs in China, were able to enrol in Australian universities, as long as they could pass the IELTS. Because of this, the quality of mainland Chinese students

becomes suspect in the eyes of Australians. The term 'overseas rubbish' arose out of this situation and quickly spread across China when this cohort returned home. As a result, the approaches to learning and national identities held by those students are expected to vary extensively.

3.3.2 Of Chinese Hong Kong students

Hong Kong has a non-compulsory three-year kindergarten education followed by a legal required six-year primary education and three-year junior secondary education. This is followed by a non-compulsory two-year senior secondary education and a two-year matriculation course leading to the Advanced Level examinations. There are tertiary institutions offering various bachelors, masters and doctoral degrees, other higher diplomas and associate degree courses (Education and Manpower Bureau, 2004). With eight universities and several other tertiary institutions in just one city, tertiary education plays a key role in the education system of Hong Kong. The University of Hong Kong and the Chinese University of Hong Kong are considered the top two universities in Hong Kong.

While the mainstream education system in Hong Kong has often been described as a "Peking Duck-style education" (Chinese: 填鴨式教育), meaning that students are learning in a spoon-fed manner by being made to memorize books for examinations, i.e. rote learning (Wikipedia, 2006a), the HKALE (Hong Kong Advanced Level Examinations) has always been regarded as very competitive and challenging. As of 2000, only 18 % of the 17-20 year age group had access to tertiary education said Tung Chee Hwa, Chief Executive of Hong Kong Special Administrative Region of the People's Republic of China. The situation changed a lot in 2003 but was still competitive in that 50.3% of students who attended the HKALE met the general entry requirement to their respective university (Wikipedia, 2006a). Under these circumstances a number of Hong Kong students embarked upon the Australian tertiary educational market in order to pursue further education and for western knowledge.

Hong Kong English often refers to the second language spoken by the Cantonese-speaking population of Hong Kong, but it could also be the first language spoken by the resident British community, the Eurasians and local-born South Asians.

Hong Kong English is only a variant of English with some local influence. Although English is an official language as is Chinese in Hong Kong, and is widely used in business activities, for most of the population who are ethnic Chinese, it is a second language acquired from school education. The teaching medium in most of the local schools is Chinese with English as a second language. Although most recently, English has been adopted as the language of instruction widely through the Hong Kong secondary schooling systems, the effects of English improvement in Hong Kong students are not seen clearly, due to the English levels of some school teachers and also because of the fact that Chinese has remained as the everyday communicative language outside the classroom. By and large, English in Hong Kong is most likely to be overtaken by Chinese (Wikipedia, 2006a).

3.3.3 Of Chinese Singaporean students

Singapore places huge emphasis on the education system as the government believes human talent is the most valuable resource. Formal education in Singapore begins with 6 years of primary school, leading to 4 years of secondary school. Students who pass the GCE O Level (General Common Entrance-Ordinary level) examination at the end of Secondary year 4 or 5 will have to compete for admission to either a Junior College (2 years), a Polytechnic (3 or 4 years) or a Pre-University Centre (3 years). Finally, students who pass the GCE A Level (Advance level) examination at the end of Junior College Year 2 or Pre-University Year 3, and students with excellent results at the end of Polytechnic Year 3/4 will then have to compete for admission to a local university, either the National University of Singapore (NUS) or Nanyang Technological University (NTU). Previously the schools operated under a modified British-style system in which the main qualifications were the Cambridge University-administered General Common Entrance (GCE) Ordinary level (O level) and Advanced level (A level) examinations. Singapore secondary students took the same examinations as their counterparts in Britain or in British system schools throughout the world. All instruction was in English, with supplementary teaching of the students' appropriate "mother tongue"--Malay, Tamil, or Mandarin.

The competitive environment of most schools in Singapore is well known. Children are assessed many times each year by their teachers via homework, projects, tests and exams. Streaming is part and parcel of this competition. Children are streamed into various classes according to their academic ability, which is highly dependent on

their grades. Singapore schools are even ranked according to the national exam grades that their students received each year. A key education indicator from the Ministry of Education, Singapore (2004) showed that, during the five years from 2000 to 2004, the gross enrolment ratio of tertiary education still lingered around 45-47%, which means that a majority of the GCE A Level examination applicants did not gain a chance to study at domestic universities. Therefore, many of them who are able choose to study abroad.

The English language has had a place in Singapore since the East India Company was established there in 1819. As more and more of its people learned English at school, it became widely spoken, alongside Singapore's many other languages. Since Singapore became an independent Republic in 1965, the use of English has increased still further, and since 1987 all Singaporean children are educated through the medium of English (they must also study another language at school). Many Singaporeans, use English as their main language. Many families speak English at home and it is one of the first languages learnt by about half of current pre-school children. Nearly everyone in Singapore speaks more than one language, with many people speaking three or four. Most children grow up bilingual from infancy and learn more languages as they grow up. From kindergarten, Singaporean children start to learn two languages, English as the first language and Chinese, Malay or Tamil as a Mother Tongue language (EIU, 2005; Ministry of Education, 2004; Singapore Education, 2003).

3.3.4 Of Chinese Malaysian students

In Malaysia, while the federal government provides free, non-compulsory primary and secondary education, systematic discrimination in favour of bumiputeras has been imposed by the government. The primary education system is divided into the national schools (Sekolah Kebangsaan) and vernacular schools (Sekolah Rendah Jenis Kebangsaan) (literally national-type school), the former of which is fully funded by the government; but the latter only partially funded. The official medium of instruction in national schools is Malay. Vernacular schools generally conduct classes in Mandarin for Chinese vernacular schools and Tamil for Tamil vernacular schools. Despite lack of government financial assistance, most students from Chinese schools excel in standardised tests. Some students from other ethnic backgrounds

enrol in Chinese schools for the supposed better education. All independent Chinese secondary schools are supported through student fees and donations from the public.

Ethnic discrimination occurs in admission for tertiary education which gives a big push to Chinese ethnic students in Malaysia in their deciding to study abroad. Tertiary education in the public universities is heavily subsidised by the government. Applicants to public universities must have completed the matriculation program or have a Sijil Tinggi Persekolahan Malaysia (STPM) grade. Excellence in these examinations does not guarantee a place in a public university. The selection criteria are largely opaque as no strictly enforced defined guidelines exist. There are ten public universities in Malaysia open to all Malaysians, but one only for Bumiputra. Private university students pay full tuition fees and most of the universities are formed by GLC (Government Linked Companies). Racial quotas, a highly politicised and controversial issue in Malaysia, exist for university admission. A race-based quota is applied on the admission process, with 90% of the places being reserved for the bumiputeras, and the other 10% for the non-bumiputeras to which Chinese Malaysian students belong. It is easy to see that, as non-bumiputeras, Chinese Malaysians have to compete with other non-bumiputeras for 10% of the quota, which undoubtedly leads to much less chance of entering local universities. As a result, compared with other national students in this study, more high-achieving and high-performing Chinese ethnic students are compelled to study overseas. However, in 2002 the government announced a reduction of reliance on racial quotas, instead leaning more towards meritocracy (Britannica Online, 2006a).

Theoretically, English as spoken in Malaysia is based on British English and called Malaysian English. British spelling is generally followed. However, the influence of American English modes of expression and slang is strong, particularly among Malaysian youth. Since 1968, Malay, or Bahasa Melayu, has been the country's sole official language. To fight the racial policy against non-bumiputeras, in vernacular schools for Chinese ethnics, classes are generally conducted in Mandarin. Therefore, English is the first language for Chinese Malaysian students, even though it is not usually used in their everyday life. Their English is not as good as Singaporean students, who have English as their first language; or as good as students in Hong Kong, where English is their official language (Wikipedia, 2006b).

3.4 The Chinese culture

The culture of China is home to one of the world's oldest and most complex civilisations. China boasts a history rich in over 5,000 years of artistic, philosophical, and political advancement. Though regional differences provide a sense of diversity, commonalities in language and religion connect a culture distinguished by such universally significant contributions as Confucianism. The culture of China is credited with shaping much of Chinese thought, Confucianism was the official philosophy throughout most of Imperial China's history, and mastery of Confucian texts provided the primary criterion for entry into the imperial bureaucracy.

Confucianism (Chinese: 儒学, literally "The School of the Scholars"; or, less accurately, "the Religion of Confucius"(Chinese: 孔教), is a Chinese ethical and philosophical system originally developed from the teachings of the early Chinese sage Confucius. It is a complex system of moral, social, political, and religious thought which has had tremendous influence on the history of Chinese civilisation right up until the 21st century. Some people in the West have considered it to have been the "state religion" of imperial China. Debated during the Warring States Period and forbidden during the short-lived Qin Dynasty, Confucianism was chosen by Han Wudi for use as a political system to govern the Chinese state. Despite its loss of influence during the Tang Dynasty, Confucianist doctrine remained a mainstream Chinese orthodoxy for two millennia until the 20th century, when it was attacked by radical Chinese thinkers as a vanguard of a feudal system and an obstacle to China's modernisation, eventually culminating in its repression and vilification during the Cultural Revolution in the People's Republic of China. Since the end of the Cultural Revolution, Confucianism has been revived in mainland China, and both interest in and debate about Confucianism have surged.

The cultures most strongly influenced by Confucianism include those of China, Japan, Korea, Singapore, and Vietnam, as well as various territories including Hong Kong, Taiwan, and Macau, (settled predominantly by ethnic Chinese). Confucianism as passed down to the 20th and 21st centuries derives primarily from the school of the Neo-Confucians, led by Zhu Xi, who gave Confucianism renewed vigour in the Song and later dynasties. Neo-Confucianism combined Taoist and Buddhist ideas

with existing Confucian ideas to create a more complete metaphysics than had ever existed before. At the same time, many forms of Confucianism have historically declared themselves opposed to the Buddhist and Taoist belief systems.

A simple way to appreciate Confucian thought is to consider it as being based on varying levels of honesty. In practice, the elements of Confucianism accumulated over time and matured into the following forms:

- Ritual. Ritual (Chinese: 禮 originally signified "to sacrifice" in a religious ceremony. In Confucianism the term was soon extended to include secular ceremonial behaviour before being used to refer to the propriety or politeness which colours everyday life. Rituals were codified and treated as an all-embracing system of norms. Confucius himself tried to revive the etiquette of earlier dynasties, but following his death he himself became regarded as the great authority on ritual behaviour.
- Relationships. One theme central to Confucianism is that of relationships, and the differing duties arising from the different status one holds in relation to others. Individuals are held to simultaneously stand in different degrees of relationship with different people, namely, as a junior in relation to their parents and elders, and as a senior in relation to their children, younger siblings, students, and others. While juniors are considered in Confucianism to owe strong duties of reverence and service to their seniors, seniors also have duties of benevolence and concern toward juniors. This theme consistently manifests itself in many aspects of East Asian culture even to this day, with extensive filial duties on the part of children toward parents and elders, and great concern of parents toward their children.
- Filial piety. Filial piety, filiality, or filial devotion (Chinese: 孝) is considered among the greatest of virtues and must be shown towards both the living and the dead. The term "filial", meaning "of a child", denotes the respect and obedience that a child, originally a son, should show to his parents, especially to his father. This relationship was extended by analogy to a series of five relationships or five cardinal relationships (Chinese: 五倫):
    - father and son (Chinese: 父子),
    - ruler and subject (Chinese: 君臣),
    - husband and wife (Chinese: 夫婦),

- elder and younger brother (Chinese: 兄弟),
- between friends (Chinese: 朋友)

Specific duties were prescribed to each of the participants in these sets of relationships. Such duties were also extended to the dead, where the living stood as sons to their deceased family. This led to the veneration of ancestors.

In time, filial piety was also built into the Chinese legal system: a criminal would be punished more harshly if the culprit had committed the crime against a parent, while fathers exercised enormous power over their children. Much the same was true of other unequal relationships.

The main source of our knowledge of the importance of filial piety is The Book of Filial Piety, a work attributed to Confucius but almost certainly written in the third century BC. Filial piety has continued to play a central role in Confucian thinking to the present day.

- Loyalty. Loyalty (Chinese: 忠) is the equivalent of filial piety on a different plane, between ruler and minister. It was particularly relevant for the social class to which most of Confucius' students belonged, because the only way for an ambitious young scholar to make his way in the Confucian Chinese world was to enter a ruler's civil service. Like filial piety, however, loyalty was often subverted by the autocratic regimes of China. Confucius had advocated a sensitivity to the realpolitik of the class relations that existed in his time; he did not propose that "might makes right", but that a superior who had received the "Mandate of Heaven" (see below) should be obeyed because of his moral rectitude.

  In later ages, however, emphasis was placed more on the obligations of the ruled to the ruler, and less on the ruler's obligations to the ruled.

- Humaneness (Chinese, 仁). Confucius was concerned with people's individual development, which he maintained took place within the context of human relationships. Ritual and filial piety are the ways in which one should act towards others and derive from an underlying attitude of humaneness. Confucius' concept of humaneness is probably best expressed in the

Confucian version of the Golden Rule phrased in the negative: "Do not do to others what you would not like them to do to you".

Humaneness also has a political dimension. If the ruler lacks humaneness, Confucianism holds, it will be difficult if not impossible for his subjects to behave humanely. Humaneness is the basis of Confucian political theory: it presupposes an autocratic ruler, exhorted to refrain from acting inhumanely towards his subjects. An inhumane ruler runs the risk of losing the "Mandate of Heaven", the right to rule. Such a mandateless ruler need not be obeyed. But a ruler who reigns humanely and takes care of the people is to be obeyed strictly, for the benevolence of his dominion shows that he has been mandated by heaven. Confucius himself had little to say on the will of the people, but his leading follower Mencius did state on one occasion that the people's opinion on certain weighty matters should be polled.

- The perfect gentleman (Chinese: 君子). The term "The perfect gentleman" is a term crucial to classical Confucianism. Literally meaning "son of a ruler", "prince", or "noble", the ideal of a "gentleman," "proper man," or "perfect man" is that which Confucianism exhorts all people to strive towards. A succinct description of the "perfect man" is one who "combine[s] the qualities of saint, scholar, and gentleman" (CE). (In modern times, the masculine bias in Confucianism may have weakened, but the same term is still used; the masculine translation in English is also traditional and still frequently used.) A hereditary elitism was bound up with the concept, and gentlemen were expected to act as moral guides to the rest of society. They were to:
    - cultivate themselves morally;
    - participate in the correct performance of ritual;
    - show filial piety and loyalty where these are due; and
    - cultivate humaneness.

The great exemplar of the perfect gentleman is Confucius himself. Perhaps the greatest tragedy of his life was that he was never awarded the high official position which he desired, and from which he wished to demonstrate the general well-being that would ensue if humane persons ruled and administered the state.

> The opposite of the perfect gentleman was the 'small person' (Chinese: 小人), literally "small person" or "petty person." Like English "small", the word in this context in Chinese can mean petty in mind and heart, narrowly self-interested, greedy, superficial, and materialistic.

Rectification of Names: Confucius believed that social disorder resulted from failing to call things by their proper names, and his solution was "Rectification of Names/Terms" (Chinese: 正名). When being asked about government, Confucius replied, "There is government, when the prince is prince, and the minister is minister; when the father is father, and the son is son." (Analects XII, 11, tr. Legge).

3.5 Discussion

> *People often mention the ability of the mainland Chinese to go around the rules, their positive attitude and eloquence; the law-abiding conscience, the community sense and the empirical characteristic of the Hong Kong people; the docility, the punctiliousness, authority-worshipping of the Singaporeans.... The linguistic style and wording are so different that some have claimed that their segregated evolution over the last several decades has left its imprint on the appearance, gesture and image of these communities. If you come across a unknown Chinese person, you can almost tell correctly his community background in no time. (Chen, 2004 p. 4)*

Chen (2004) further points out that communities like the mainland Chinese, the Hong Kong people, the Chinese Singaporeans and the Chinese Malaysians differ considerably from one another in such cultural aspects as behavioural approach, thinking mode, mental attitude and vocabulary.

This is exactly what this chapter is about, aiming to explore the reasons underlying such diversities mentioned above. From the foregone descriptions, we know that mainland China, Hong Kong, Singapore and Malaysia underwent different historical processes and formed their own social-political and economic methods, and educational systems. Although, all embrace Confucian Heritage Culture (CHC), Hong Kong, Singapore and Malaysia have their roots in the culture and civilisation

of pre-revolutionary China, along with modifications brought about by local circumstances and environment. And due to different local circumstances and environment, their cultures have taken on different traits which in turn may affect the way that they approach learning tasks and cognition of their national identities in Australian universities.

First of all, the social-political systems in these three countries and one region played a big part in maintaining or transforming the CHC. The social-political differences among these countries and regions appear to be that mainland China operates on a one-party socialist system, whereas Singapore and Malaysia run on the basis of parliamentary capitalism, along with Hong Kong which however has limited suffrage. In Hong Kong, 98% of the population are Chinese ethnics, both before Hong Hong returned to China or after, and the atmosphere of democracy contributes to the maintenance of Chinese culture. In Singapore and Malaysia, as two parliamentary countries, their governments have implemented a multicultural policy and encouraged the keeping of their respective cultures, although the Chinese ethnic populations account for over three fourths and one third of their respective population. However, Chinese ethnic situations manifest themselves very differently in these two countries. In Singapore, the Chinese party, PAP, dominates the government, while in Malaysia, Chinese ethnics are constrained from normal development in both the economic and political fields. Arguably, it can be said that political environments determine the nature of which national cultures are advocated and promoted in their respective countries. In general, CHC (Confucian Heritage Culture) in Hong Kong, Singapore and Malaysia seem to have rarely been intentionally damaged by external forces.

However, when looking back at what happened to CHC in mainland China, it is clear that the political environment of China has been hostile to its culture. In the Mao era, politics totally controlled culture, which was under attack from two sides. On the one hand, Marxism-Leninism came to dominate China as a national ideology. Traditional features like humanism, propriety, tolerance and refined manners were labelled feudalistic and eliminated by the political system. On the other hand, certain politicised Confucian concepts, such as "the three cardinal guides" and "the five constant virtues", were used to form the management model of the ruling class and provide the cultural background for the political operation of the Communist

dictatorship. The cultural crisis is closely related to the fact that politicised Confucianism and Marxism share the same structure, and to the "anti-intellectualism" shared by the vulgar culture and marginalised cultural thinking in Marxist, Leninist and Mao thought. Under this double blow, the collapse of culture was complete during the so-called "Cultural Revolution", when the opposites "anti-tradition" and "extreme tradition" appeared at the same time. Such deconstruction of Chinese culture is fundamental, as it happens at all levels of the cultural value system, whether they are mainstream traditional or derivative beliefs, refined culture or popular culture. With "anti-tradition" and other official slogans aimed to sweep away old customs, feudalism and political enemies, the genteel class was eliminated, intellectuals and the representatives of Chinese culture were prosecuted, millennia of Chinese civilisation, along with cultural classics and relics, were destroyed. While on the other hand, the imperial hierarchical system, the monarchical power and obscurantism were prevalent to their extremity. The cultural crisis in China lies mainly in the loss of humanist spirituality and the general value vacuum. The unified traditional Chinese culture has disintegrated; many of the historically established concepts have been lost. Thus it is not difficult to see that the dilution of Chinese features means that traditional Chinese culture is no longer indigenous, singular and pure. Diversity happens not only between different cultures such as Chinese and Western cultures, but among variations of the same culture. Consequently, since the 1950s, the once highly unified culture (CHC) is now fragmented, leading to a variety of cultural derivatives. Although still called Chinese culture, they each have their distinctive forms.

Secondly, in light of the economic development of these four countries and regions as briefly introduced above, in 2004 the rankings of GDP per capita among them were Hong Kong 15, Singapore 29, Malaysia 84 and P. R. China 122 (World Facts and Figures, 2004). Diversity between the poor and the rich is reasonable in each of them, however the imbalance of regional developments in China has widely been recognised by the world and even warned of by a number of renowned people. This also happens in Malaysia, though much less seriously than in China. The differences of economic development in turn reflect the formation of their different national identities in line with the following theory of Marx. Karl Marx (Marx, 1967) said that economic infrastructure determines superstructure indicating that economic development level is a determining factor in people's ideologies.

Lastly, as detailed above, education in all these countries and region has been highly emphasised, and by means of high standard testing systems, the competition among these students is very intense, although there are slight differences in their educational policies. However, what this author argues here is that just these slight differences turns out to be the major reason for the composition of these overseas Chinese background students in Australia. Thus some mainland Chinese students choose to study overseas because they are unable to compete in China's education system, as studying overseas can be seen as a less painful way of gaining entrance into an overseas university (Hai, 2001); while Malaysian Chinese students pursue their education in Australia due to a race-based quota which greatly favours bumiputeras, so they may be high-performed students; Hong Kong and Singaporean Chinese students venture into Australian tertiary education possibly in an attempt to escape rote-learning teaching styles or competitive environments in their home countries, backed up by better finances. Therefore, the cohort of Chinese background students in Australia can be clearly seen as different from the remaining groups of their schoolmates back in their own countries or regions.

Chinese background students venture to Australia for education, not only with a strong desire for advanced knowledge but also with distinctive characteristics developed through their life in a particular social context of their own countries. Some of these characteristics will be weakened, even eventually changed through education in Australian discourse; while others might be with them for the rest of their lives, and regarded as inherent to their culture and not least stamped by the society in which they lived, in other words, their particular social culture.

Chapter 4

Methodology

4.1 Introduction

The approaches to research in this study are dealt with in this chapter. In order to conduct a comprehensive research on approaches to learning used by Chinese background students in Australian tertiary education, a combined methodology is employed by means of quantitative analyses of responses to structured learning approaches questionnaires, and a focused qualitative approach based on content analyses of in-depth interviews to aid the understanding of the Chinese background students. In using qualitative methods, thematic analysis is taken as a means of analysing the interview transcripts; confirmation of the results of interview analysis is carried out to explore the identities of these students as well as further examine their approaches to learning; and critical theory is the perspective employed in government document analysis.

4.1.1 Background

Despite a great deal of research related to Chinese background students, as yet there has been no comparative study amongst all of the major groups of Chinese background students in Australia, for example: from mainland China, Malaysia, Hong Kong, and Singapore. Most of the relevant research focuses on Chinese background students or students with the Confucian Heritage Culture (CHC) background as a homogeneous group (Barker, 1993; Barron, 2005; Biggs, 1996; Biggs & Watkins, 2001; Matthews, 2001; Paton, 2005; Pickering & Morgan, 2004; Smith & Smith, 1999; Smith, 1995; Smith et al., 1998; Snider, 2005). Of all the studies pertinent to Chinese background students, Smith's study (2001) stands out for the way in which it identified specific differences between three national groups

(Malaysia, Singapore and Hong Kong) of Chinese background learners. However, Smith excluded mainland Chinese students. Given that mainland Chinese students make up the majority of Chinese background students, it is vital to include them in further research.

4.1.2 Research aims and objectives

This thesis is concerned with informing approaches to Australian course design and delivery by the identification of approaches to learning of different Chinese background students in Australian tertiary education discourse, for example from mainland China, Malaysia, Singapore, Hong Kong. It is also concerned with the exploration of Chinese student approaches to study in light of the debate that Chinese background students are rote learners, and are prone to adopting surface learning strategies such as memorisation. Finally, the research examines the national identities of different Chinese background students from both their own perspective and the Australian government's perspective. In order to achieve these goals, the following research objectives are addressed:

- ***Research Objective 1:*** to identify and examine Chinese background students' learning approaches in Australian tertiary education discourse, by separately investigating motivation, self-related belief, learning strategies, and learning preferences;
- ***Research Objective 2:*** to explore the social, linguistic and educational factors affecting Chinese background students in their learning an Australian educational discourse;
- ***Research Objective 3:*** to pinpoint the educational and pedagogical implications for Australian tertiary institutions in dealing with Chinese background students? to devise some guiding principles for teachers who are or will be teaching Chinese background students at Australian universities;
- ***Research Objective 4:*** to explore the national identities perceived by the Chinese background students;
- ***Research Objective 5:*** to examine the Australian government 's treatment of different Chinese background students in its student entry processing;
- ***Research Objective 6:*** to examine the stereotype that Chinese background students are rote-learners.

4.2 Research Design

> 'Methodology refers to the choices we make about cases to study, methods of data gathering, forms of data analysis etc. in planning and executing a research study... in social research, methodologies may be defined 'very broadly' (e.g. qualitative and quantitative)' . (Silverman, 2001 p. 4)

The methodological principles guiding this research are set out below in order to assist the reader to gain a thorough understanding of how the research is conducted. The methodology for this inquiry into approaches to learning is framed within triangulation. Triangulation may be defined as the use of two or more methods of data collection in the study of some aspect of human behaviour (Cohen et al., 2003). Cohen, Manion, and Morrison further state that triangulation is a technique in the social sciences that attempts to fully map the richness and complexity of human behaviour by studying it from more than one standpoint and in so doing, by making use of both quantitative and qualitative data. Campbell and Fiske (1959) also voice that triangulation is a powerful means of demonstrating concurrent validity, particularly in qualitative research. Herein, we can see that triangulation is the application and combination of several research methodologies in the study of the same phenomenon. It can be employed in both quantitative and qualitative studies by combining multiple theories, methods, and empirical materials, and through these researchers can hope to overcome the weakness or intrinsic biases and the problems that come from single method, single-theory studies. This is the reason that triangulation is favourably employed in this study in order to increase the validity and reliability of its research outcomes. The researcher also is aware that there are different views of triangulation. In this study, of the concept 'triangulation' is used in a broad sense. On other words, it is accepted in this study that the use of combined methodology, mainly quantitative and qualitative, provides different types of insights into the understanding of issues under investigation. This chapter outlines the methodology standpoints through both quantitative methods by questionnaire, and qualitative methods by interview, participant observation, and critical discourse analysis (Fairclough, 1995; Foucault, 1972; Dijk, 1993).

Qualitative research 'stress(es) the socially constructed nature of reality, the intimate relationship between the researcher and what is studied, and the situational constraints that shape inquiry... in contrast, quantitative studies emphasize the

measurement and analysis of causal relationships between variables, not process' (Denzin & Lincoln, 2003, p. 13). However, a question needs to be worth asking in the first place and capable of being answered here is that of where its strengths and weaknesses lie. For the quantitative method or the scientific method,

> (T)he main strengths lie in precision and control. Control is achieved through the sampling and design; precision through quantitative and reliable measurement...hypotheses are tested through a deductive approach and the use of quantitative data permits statistical analysis. In total, the method provides answers which have a much firmer basis than the layperson's common sense or intuition or opinion... Limitations of the scientific approach: Many researchers are concerned that the scientific quantitative approach denigrates human individuality and ability to think. Its mechanistic ethos tends to exclude notions of freedom, choice and moral responsibility...This produces a synthetic puppet show rather than a rich dynamic melange of human behaviours; an artificial situation, the results of which have no bearing on real life. (B Burns, 1994 pp. 9-10)

The qualitative method is described as a net of deep-sea explorers, in order to be able to pull up unexpected and striking things (Barton & Lazarsfield, 1969, p. 166). This statement hits the nail on the head in that the significance of adopting qualitative methods lies in identifying insights of research targets. Further explanation was given by Burns:

> This proximity to the field often allows the evaluator to see (and document) the qualities of educational interaction too often missed by the scientific, more positivistic inquiries. Such propinquity can reveal subtleties and complexities that could go undetected through the use of more standardised measures... Qualitative descriptions can play the important role of suggesting possible relationship(s), causes, effects, and even dynamic processes in school settings...The problem of adequate validity and reliability is a major criticism placed by quantitative researchers on qualitative methods. Because of the subjective nature of qualitative and its origin in single contexts, it is difficult to apply conventional standards of reliability and validity... Parlett (1975) notes that because of the intimacy of participant-observer relationships within the setting there is no doubt that the researcher's mere presence will have profound reactive effects on the subjects of the study. (Burns, 1994, pp. 13-14)

In order to maximise the exploration of Chinese background student approaches to learning, this study arms its research methodology with both quantitative method and qualitative method in order to adopt the strong points of both methods and to offset their respective weaknesses, i.e. methodological triangulation. Methodological triangulation is characterised by a multi-method approach in contrast to a single-

method approach by using different methods on the same object of study (Denzin, 1970). 'The notion of triangulation bridges issues of reliability and validity...possibly has the most to offer' (Cohen et al., 2003 p. 114, 115). Cohen, Manion, and Morrison claim that 'the advantages of the multi-method approach in social research are manifold and we examine two of them (quantitative and qualitative methods).' Lin (1976) also mentions that exclusive reliance on one method, therefore, may bias or distort the researcher's picture of the particular slice of reality he is investigating. The more the methods contrast with each other, the greater the researcher will be confident about the findings. Thus 'the use of triangular techniques, it is argued, will help to overcome the problem of method-boundedness' (Cohen et al., 2003 p. 113). Framed under triangulation in this study, quantitative research will be based on empirical information collected through a questionnaire -- the revised OECD one. Then the qualitative research adopts the method of interview for a deep understanding of human behaviour (Strauss & Corbin, 1990). Excerpts of responses on the questionnaire and at interview are compared to investigate the consistency with which the students responded to the same items in different situations. A questionnaire and a semi-structured interview schedule are constructed for data collection in this study.

4.3 Quantitative research

The used questionnaires are a major form of quantitative research. 'A questionnaire is a self-report instrument used for gathering information about variables of interest to an investigator. It consists of a number of questions or items on paper that a respondent reads and answers' (Wolf, 1997, p. 422).

4.3.1 Questionnaire

The questionnaire that was used in this study assesses how different Chinese background students self-report their approaches to learning.

Basically, this research adopts the framework of the PISA (OECD, 2003) survey for its questionnaire, selectively identifying ten characteristics out of the thirteen characteristics of Chinese background students under four categories used by OECD. In addition to these, two learning strategies, organisational and affective strategies, identified and espoused by a number of researchers on learning strategies are also included in the questionnaire of this research (Dansereau et al., 1979; Weinstein,

1988; Weinstein & Underwood, 1985). Consequently, the categories of the questionnaire come under the four broad elements of motivation, self-related beliefs, learning strategies and learning preferences with a total of twelve learning characteristics.

Detailed characteristics of each broad element are explored as basic parameters to measure. Briefly described below are the respective characteristics of each category. In the category of learning strategies, there follow four parameters of: memorisation strategies; elaboration strategies; organisational strategies; affective strategies and control. Under the title of motivation: instrumental motivation; interest in reading; and effort and persistence in learning will be examined. Within self-related beliefs, the factors of self-efficacy, self-concept of verbal competencies, and academic self-concept are examined. Learning preferences deal with two other aspects of approaches to learning: whether different Chinese background students have different preferences, respectively, for co-operative or competitive learning. Strictly speaking, these two aspects do not directly relate to students' regulation of their own learning which is set as a primary goal of education by OECD.

To sum up, there are twelve characteristics of approaches to learning under four categories. Students are asked to answer several questions about each of them while their responses are used to score themselves on a scale rating the degree to which they have the relevant characteristics. From Table 2, we can see that the survey sets out the twelve characteristics being investigated under four categories, giving the rationale for their selection, as well as examples of exactly what students will be asked. The full set of questions is shown in Appendix A.

Table 2: 10 characteristics of Chinese background students as learners

Category of characteristics and rationale	**Student characteristics used to construct a scale to report results**	**Example of statement shown to students**	**What students are required to do**
A. learning strategies Learning strategies are the plans students select to achieve their goals: the ability to do so distinguishes competent learners who can regulate their learning (Brown et al., 1983; Zimmerman & Martinez-Pons, 1990). Cognitive strategies that	1. Uses ***memorisation*** strategies. These involve verbatim representations of knowledge stored in memory with little or no further processing.	"When I study, I memorise as much as possible."	State frequency*
	2. Uses ***elaboration*** strategies to connect new material to prior learning. By exploring how knowledge learned in other contexts relates to new material,	"When I study, I figure out how material fits in with what I have	State frequency*

require information processing skills include memorisation and elaboration, shown here, as well as others such as organizational and affective strategies. Metacognitive strategies, implying conscious regulation of learning, are summed up in the concept of control strategies.	students acquire greater understanding than through simple memorisation.	learned."	
	3. Uses organisational strategies to transfer information from one medium to another. These strategies help students organise knowledge in a certain way or develop a holistic picture of knowledge	"When I study, I try to group the material by certain characteristic"	State frequency*
	4. Uses affective strategies help create and maintain suitable internal and external climates for learning.	"When I study, I try to find a quiet place to study to reduce external distractions"	State frequency*
	5. Uses ***control*** strategies to ensure one's learning goals are reached. These strategies involve checking what one has learned and working out what one still needs to learn, allowing learners to adapt their learning to the task at hand.	"When I study I force myself to check to see if I remember what I have learned"	State frequency*
B. Motivational preferences and volition Motivation can be regarded as the driving force behind learning. One can distinguish motives deriving from *external rewards* for good performance such as praise or future prospects, from *internally* generated motives such as interest in subject areas (Deci & Ryan, 1985; Schiefele et al., 1992). Distinct from motivation is volition, shown at the time that learning takes place and leading to effort and persistence (O'Neil & Herl, 1998)	6. Has ***instrumental motivation*** -i.e. a student is encouraged to learn by external rewards such as good job prospects. Longitudinal studies (Wigfield, Eccles, & Rodriguez, 1998) show that such motivation influences both study choices and performance.	"I study to get a job"	State frequency*
	7. Shows ***interest in reading*** Interests in a subject is a relatively stable orientation affecting intensity and continuity of engagement in learning situations, selection of strategies and depth of understanding. The degree to which students show interest can be seen as an important strength or weakness of school systems.	"When I read, I sometimes get totally absorbed."	State agreement**
	8. Shows ***effort and persistence*** – this requires volition – a will to learn shown immediately before and during the learning process.	"When studying, I put forth my best effort."	State frequency*
C. Self-related beliefs Learners form views about their own competence and learning characteristics. These views have been shown to have considerable impact on the way they set goals, the strategies they use and their achievement	9. ***Self-efficacy*** – i.e., believes in own ability to handle learning situations effectively, overcoming difficulties. This affects students' willingness to take challenging tasks and to make an effort and persist in tackling them: it thus has a key impact on motivation (Bandura,	"I'm certain I can understand the most difficult material presented in readings."	State frequency*

(Zimmerman, 1999). Two ways of defining these beliefs are in terms of how well students think that they can handle even difficult tasks – self-efficacy (Bandura, 1994) and in terms of their belief in their own abilities – self-concept (Marsh, 1993). In both cases, confidence in oneself has important benefits for motivation and for the way in which students approach learning tasks.	1994)		
	10. ***Academic self-concept*** – i.e., believes in own competence in school subjects overall. Belief in one's own abilities is highly relevant to successful learning (Marsh, 1986), as well as being a goal in its own right, affecting well-being and personality development which is especially important to students from less advantaged backgrounds.	"I learn things quickly in most subjects."	State agreement**
D. Learning situations – preferences A good learner needs to be able to learn both independently and in a group (Baumert et al., 1998). No one type of preference is superior, and preferences for the two types are not mutually exclusive.	11. Has preference for ***co-operative learning.***	"I learn the most when I work with other students."	State agreement**
	12. Has preference for ***competitive learning.***	"Trying to be better than others makes me work well."	State agreement**

* Students asked whether statement is true "almost never", "sometimes", "often" or "almost always".
** Students asked whether they "disagree", "disagree somewhat", "agree somewhat" or "agree" with the statement.

(Some extracted from PISA (OECD, 2003))

4.3.2 Participants

Participants were 179 on-campus Chinese background students from mainland China, Malaysia, Singapore and Hong Kong at the University of Tasmania and La Trobe University. The definition of Chinese background students used in this research derives from the Smith et al. (1998) study, which defines their Chinese sample as students of Chinese origin and who spoke a Chinese dialect as their mother tongue, i.e. students with the Confucian Heritage Culture of the Chinese. In other words, be that as it may, my discussion here centres on the Chinese segment of CHCs. Of the 179 Chinese students, 85 will be from mainland China, 49 from Malaysia, 22 from Hong Kong and 23 from Singapore. The number of questionnaire participants from each country reflects the proportion of students from each country participating in Australian tertiary education. All participating university students have to indicate the length of their stay in Australia in order to explore the influences on these students through the time they have studied in Australian tertiary education. In this study, most of the participating students were drawn from the University of

Tasmania, but a few were from La Trobe University in line with the OECD's findings:

> Differences between the characteristics of students as learners in different countries and between students in different schools within countries, account for only a small part of the variation in approaches to learning. The most important source of this variation lies within schools, each of which contains stronger and weaker learners. (2003 p. 25)

Total numbers of participants at each stage are listed in Table 3:

Table 3: Numbers of Participants for the Questionnaire and Interviews

Data Collection		Aims	Participants
1	Responses to the revised PISA questionnaire	-to identify the responses of these students in terms of their motivation, learning strategies, self-beliefs, and learning preferences	179 students involving • 85 from mainland China • 49 from Malaysia • 22 from Hong Kong • 23 from Singapore
2	Interview	-to pursue in-depth information of students' approaches to learning and their national identities in the context of Australian educational discourse	12 from the total 179 students involving • 5 from mainland China • 3 from Malaysia • 2 from Hong Kong • 2 from Singapore

4.3.3 Questionnaire data collection

Since ethics approval and permission was obtained, data collection was conducted using the revised OECD questionnaire mentioned above. Therefore, for better understanding, the questionnaire was provided in English. The following generic information was also asked:

Nationality;
Gender;
Course engaged;
Length of Stay (up to now);

Degree;
English Proficiency including:
Listening
Speaking
Reading
Writing

As most Chinese background students were in accounting and IT courses at the University of Tasmania, with many of them also enrolled in some arts units, a method for collecting data within class was designed and conducted. In this method lecturers were first contacted for their permission to recruit students from their classes. If this was granted, the nature and purposes of the study were briefly explained during the lectures and copies of the explanatory statements were administered, together with consent forms. After that, the questionnaires were administered to those students who had indicated that they were interested in participating in the study. They were advised to preferably complete their questionnaires in class within 5 minutes, or complete them during their out-of-class time. The completed questionnaires were to be collected at subsequent lectures over the following week of class. Generally, most of questionnaires were collected in class time.

4.3.4 Measure and procedures

To measure student responses to these questions, the researcher assigned each student a score for each of the twelve characteristics, indicating the strength of each learning attribute. Each case was measured on a scale constructed from the replies to between three and five questions related to that characteristic. Each scale was constructed by Likert's Measurement of Attitudes (1932) giving students a score from 1 to 4 for different responses (higher numbers representing more positive responses) and taking a mean score for all the questions. For example, when asked about aspects of memorising material, a student might report two statements being true "sometimes" and two being true "often" – the middle two of the four frequency categories. This would result in a mean score of 2.5, which would be that student's score of memorisation. In the case of questions requiring agreement or disagreement, 2.5 represents a point of "neutrality", since responses 1 and 2 are negative (disagreement) and 3 and 4 are positive (agreement). In these cases students above

2.5 could be said to have positive learning characteristics and those below to have negative characteristics. For example, students below 2.5 on the reading interest scale show overall a lack of interest in reading; those below 2.5 on the three self-concept scales have a negative self-concept, i.e., lack confidence in their ability to master particular school tasks.

4.4 Qualitative research

Qualitative research in this study was underpinned by interview and government documentary analysis. The interview was used to identify in-depth interpretation of learning approaches of different Chinese background students in Australian educational discourse that was not revealed in the questionnaire, with constructivist grounded theory. Through interpreting the accounts of the student interviewees, this author also attempts to explore these students' national identities from their own perspective. National identities of different Chinese background students from the Australian government perspective are further researched in the DIMIA (Department of Immigration, Multicultural and Indigenous Affairs) documents using critical discourse analysis.

Students from the pool of participants who had agreed to be interviewed were randomly selected for interviewing. All the interviews took place within the university or the students' homes, and were audio-taped and transcribed. The researcher's learning and cultural background as a Chinese background student would undoubtedly help identify some of the Chinese background students' unspoken thoughts.

4.4.1 Interview and constructivist grounded theory

'An interview is a verbal interchange, often face to face, though the telephone may be used, in which an interviewer tries to elicit information, beliefs or opinions from another person' (Burns, 1994, p. 278). There are three basic approaches available for qualitative interviewing: structured, semi-structured and unstructured (open-ended) interview (Burns, 1994). The characteristic features of the approaches are presented below.

The structured interview tends not to be appropriate to this research since there is little flexibility in relating the interview to particular individuals and circumstances;

standardised wording of questions may also restrain the interpretation of the individual person's perception. The unstructured or open-ended question interview should not be applied to this research, either. The unstructured interview, described as 'a free-flown conversation' (Burns, 2000, p. 425), is to set up the interview without fixed questions which results in different information collected from different people with different questions. This mode is not plausible for this study as the topic of approaches to learning is too broad, wherein only the four parameters of motivation, self-beliefs, learning strategies and learning preferences are concerned. A semi-structured interview, as Burns (1994, p. 278-279) describes, has 'a specific interview schedule or none at all. An interview guide may be developed for some parts of the study in which without fixed wording or fixed ordering of questions, a direction is given to the interview so that the content focuses on the crucial issues of the study.' Burns adds that this kind of interview renders the researcher great flexibility than the close-ended type and permits a more valid response from the informant's perception of reality. Therefore for this research, the semi-structured interview is the optimum choice to collect explanatory and supplementary information as a way of obtaining the students' interpretations of their own approaches to the learning they are undertaking, and their incidents, experiences and realisations.

In the interview, induction was employed as a major interpretive perspective with a view to giving voice to the Chinese background students and reflecting the interactive nature of both the interviewer and the interviewee in conducting research into complex human issues (Charmaz, 2003c). The inductive process, based on Grounded Theory, offers opportunities for the students themselves to reveal what is important for them through the use of fairly open questions, from that their own interpretations on approaches to learning can be located, firmly grounded in the data (Charmaz, 2003c; Glaser, 1998). Under the foregoing theoretical approach, interview transcripts of individual interviewees were analysed to identify students' views and explanations regarding their approaches to learning.

> 'Grounded theory research is an emergent process rather than the product of a single research problem logically and deductively sequenced into a study – or even one logically and inductively sequenced. The initial research questions may be concrete and descriptive, but the researcher can

> develop deeper analytic questions by studying his or her data. Like wondrous gifts waiting to be opened, early grounded theory texts imply that categories and concepts inhere within the data, awaiting the researcher's discovery' (Charmaz, 2003c, p. 522)

Grounded theory emerged with the advent of The Discovery of Grounded Theory: Strategies for Qualitative Research authored by Barney G. Glaser and Anselm L. Strauss in 1967. Its emergence broke the dominance of the quantitative research paradigm in the social sciences and considerably upgraded the place of qualitative analysis which in the past operated only as mentoring (Charmaz, 2003c). This is the so called 'qualitative revolution' (Guba & Lincoln, 1994). 'Essentially, grounded theory methods consist of systematic inductive guidelines for collecting and analysing data to build middle-range theoretical frameworks that explain the collected data' (Charmaz, 2003c p. 509). In Charmaz's 2003 article he also split grounded theory into objectivist and constructivist methods. Glaser ,Strauss and Corbin (1990; 1998) claim that the former method comes close to traditional positivism, with its assumptions of an objective, external reality: it aims toward unbiased data collection, proposes a set of technical procedures, and espouses verification. While the latter in Guba and Schwandt's (1994; 1994) view assumes the relativism of multiple social realities, recognises the mutual creation of knowledge by the viewer and the viewed, and aims toward interpretive understanding of subjects' meanings. Most grounded theorists write as if their data have an objective status. Strauss and Corbin (1998) write of 'the reality of the data' and tell us, 'The data do not lie' (p.85). Data are narrative constructions (Maine, 1993). Objectivist grounded theory also believes that reality is independent of the observer and the methods used to produce it (Glaser & Strauss, 1967). However, they are reconstructions of experience; they are not the original experience itself (Bond, 1990). Charmaz (2003c, p. 514) points out that '(W)hether our respondents ply us with data in interview accounts they recast for our consumption or we record ethnographic stories to reflect experience as best we can recall and narrate, data remain reconstructions.' Objectivist grounded theory emphasises the emergence of data theory through analytic questions, hypotheses, and methodological applications; while constructivist grounded theory emphasises it through discovering data, coding it, and using comparative methods step by step (Glaser, 1978, 1992; Strauss & Corbin, 1998). 'Glaser argues that the purpose of grounded theory methods is to generate theory, not verify it' (Charmaz, 2003c, p. 513).

This study was underpinned by the framework of constructivist grounded theory. As this author agrees that '(T)he grounded theorist's analysis tells a story about people, social processes, and situations. The researcher composes the story; it does not simply unfold before the eyes of an objective viewer. This story reflects the viewer as well as the viewed' (Charmaz, 2003c, p. 522). The theoretical level of an analysis in constructivist grounded theory emerges from the researcher's interactions with interviewees which involves seeking meanings from both respondents and the researcher. To seek respondents' meaning, the researcher must go further than surface meanings or presumed meanings to look for views and values as well as acts and facts and also needs to look for beliefs and ideologies as well as situations and structures. By studying tacit meanings, the researcher clarifies, rather than challenges, respondents' views about reality (Charmaz, 2003c). 'In short, the narrowing of research questions, the creation of concepts and categories, and the integration of the constructed theoretical framework reflect what and how the researcher thinks and does about shaping and collecting the data'(Charmaz, 2003c, p. 522).

This study accepts the distinction made by constructivist grounded theory between the real and the true. The constructivist approach does not seek truth – single, universal, and lasting. Still, it remains realist because it addresses human realities and assumes the existence of real worlds. That is, the constructivist approach assumes that what we take as real, as objective knowledge and truth is based upon our perspective (Schwandt, 1994).

> 'Thus the research products do not constitute the reality of the respondents' reality. Rather, each is a rendering, one interpretation among multiple interpretations, of a shared or individual reality. Thus the grounded theorist constructs an image of a reality, not the reality – that is, objective, true, and external... we claims only to have interpreted a reality, as we understood both our own experience and our subjects' portrayals of theirs' (Charmaz, 2003c, p. 523).

Hence a grounded theorist – or, more broadly, a qualitative researcher – constructs a picture that draws from, reassembles, and renders subjects' lives. 'The product is more like a painting than a photograph' (Charmaz, 1995a)

A constructivist grounded theory assumes that people create and maintain meaningful worlds through dialectical processes of conferring meaning on their

realities and acting within them (Bury, 1986; Mishler, 1981). Thus, Charmaz (2003c) says that social reality does not exist independent of human action. A constructivist grounded theory approach is located in the realm of interpretative social science without assuming the existence of a uni-dimensional external reality. A constructivist grounded theory not only seeks to interpret how subjects construct their realities, but also recognises the interactive nature of both data collection and analysis.

> 'A constructivist grounded theory recognizes that the viewer creates the data and ensuing analysis through interaction with the viewed. Data do not provide a window on reality. Rather, the 'discovered' reality arises from the interactive process and its temporal, cultural, and structural contexts. Researcher and subjects frame that interaction and confer meaning upon it. The viewer then is part of what is viewed rather than separate from it. What a viewer sees shapes what he or she will define, measure, and analyse' (Charmaz, 2003c p. 523-524).

In contrast, objectivist grounded theorists adhere more closely to positivistic canons of traditional science (Garfinkel, 1967; Glaser, 1978, 1992; Strauss & Corbin, 1990, 1994; Wilson & Hutchinson, 1991). They assume that following a systematic set of methods leads them to discover reality and to construct a provisionally true, testable, and ultimately verifiable 'theory' of it (Strauss, 1995; Strauss & Corbin, 1990, 1994). This theory provides not only understanding but prediction. 'Objectivist grounded theory accepts the positivistic assumption of an external world that can be described, analysed, explained, and predicted: truth, but with a small t. That is, objectivist grounded theory is modifiable as conditions change' (Charmaz, 2003c p. 524). It assumes that different observers will discover this world and describe it in similar ways.

As constructivist grounded theory aims to get at meaning, not at truth. 'Different questions can flow from objectivist and constructivist starting points. Constructivist grounded theory may remain at a more intuitive, impressionistic level than an objectivist approach.' (Charmaz, 2003c, p.526). Therefore, in the design of interview questions in this research special care is taken to construct more abstract questions, focussing on meaning, rather than truth.

Strengths and limitations:

Glaser (1998)assumes that data become transparent, that researchers will see the basic social process in the field through respondents' telling what is significant. This nature of constructivist grounded theory determines its strengths and limitations.

> 'The strengths of grounded theory methods lie in (a) strategies that guide the researcher step by step through an analytic process, (b) the self-correcting nature of the data collection process, (c) the methods' inherent bent toward theory and the simultaneous turning away from acontextual description, and (d) the emphasis on comparative methods' (Charmaz, 2003c, p. 522).

This researcher is also aware of its limitations and has employed all efforts to diminish the negative effects where feasible. Charmaz mentions that 'what respondents assume or do not apprehend may be much more important than what they talk about. An acontextual reliance on respondents' overt concerns can lead to narrow research problems, limited data, and trivial analyses' (2003c p. 514). Some researchers also point out that in grounded theory methods, interviewees are not respected sufficiently. For example, Richardson has observed that 'Authors choose evidence selectively, clean up subjects' statements, unconsciously adopt value-laden metaphors, assume omniscience, and bore readers' (1994, p. 521). Conrad and Riessman (1990; 1990b) suggest that 'fracturing the data' in grounded theory research might limit understanding because grounded theorists do not aim for the portrayal of subjects. Charmaz (2003c) posits that the grounded theory method relies upon the viewer's authority as expert observer. He then adds that 'researchers can use grounded theory methods to further their knowledge of subjective experience and to expand its representation while neither remaining external from it nor accepting objectivist assumptions and procedures.'

Methods:

The rigour of grounded theory approaches offers qualitative researchers a set of clear guidelines from which explanatory frameworks are built to specify relationships among concepts. 'Grounded theory methods specify analytic strategies, not data collection methods' (Charmaz, 2003c, p. 514).

> Grounded theory methods do not detail data collection techniques; they move each step of the analytic process toward the development, refinement, and interrelation of concepts. The strategies of grounded

theory include a) simultaneous collection and analysis of data, b) a two – step data coding process, c) comparative methods, d) memo writing aimed at the construction of conceptual analyses, e) sampling to refine the researcher's emerging theoretical ideas, and f) integration of the theoretical framework. (Charmaz, 2003c, pp. 510-511)

a) simultaneous collection and analysis of rich data in this study drawn from interview involves coding emerging data whilst collecting it;
b) a two-step data coding processing means that coding starts the chain of theory development and through coding the researcher starts to define and categorise data:
   - initial or open coding proceeds through examining each line of data and then defining actions or events with it – line-by-line coding (Glaser, 1978). This form of coding helps the researcher to remain attuned to the subjects' views of their realities, rather than assume that the researcher shares the same views and worlds. Line-by-line coding sharpens the use of sensitising concepts – that is, those background ideas that inform the overall research problem (Charmaz, 2003c). Dimensionalizing and axial coding can be done during initial coding (Strauss & Corbin, 1990). These procedures are intended to make the researchers' emerging theories denser, more complex, and more precise. Strauss and Corbin urge researchers to divide properties into dimensions that lie along a continuum. In turn, a dimensional profile of the properties of a category can be developed. Axial coding is aimed at making connections between a category and its subcategories. These include conditions that give rise to the category, its context, the social interactions through which it is handled, and its consequences (Charmaz, 2003c);
   - selective or focused coding uses initial codes that reappear frequently to sort large amounts of data. This coding is more directed, typically, more conceptual than line-by-line coding (Charmaz, 1983, 1995c; Glaser, 1978). 'These codes account for the most data and categorises them most precisely. Making explicit decisions about selecting codes gives a check on the fit between the emerging theoretical framework and the empirical reality it explains' (Charmaz, 2003c). Charmaz then adds that the categories for synthesising and explaining data arise from the focused codes. In turn, the categories shape the developing analytic frameworks. Categories often subsume several codes. Conditional matrix is introduced by Strauss and Corbin (1990) as an analytic diagram that maps the range of conditions and consequences related to the phenomenon or category. They describe this matrix as a series of circles in which the outer rings represent those conditions most distant from actions and interactions and the inner rings represent those closest to actions and interactions (Charmaz, 2003c).
c) the constant comparative method of grounded theory in this study includes:

- comparing the differences of Chinese background students in terms of their views on aspects of approaches to learning and national identity;
- comparing data within each group, country or region by sex;
- comparing the diversities of males and females across all the Chinese background students;

d) memo writing records the researcher's stages of analytic development, aims at the construction of conceptual analyses in an attempt to link analytic interpretation with empirical reality. This step helps to spark the researcher's thinking and encourages him to look at his data and codes in new ways. It can help the researcher to define leads for collecting data – both for further initial coding and later theoretical sampling;

e) 'theoretical sampling is a pivotal part of development of formal theory' (Charmaz, 2003c, p. 519); during the refinement and development of categories as theoretical constructs, there are likely to be some gaps in data and holes in theories, this requires the researcher to go back to the field and collect delimited data to fill those conceptual gaps and holes – this is theoretical sampling. At this point, specific issues are chosen to sample for precise information to shed light on the emerging theory. 'The aim of this sampling is to refine ideas'; (Charmaz, 2003c, p. 519).

> 'Theoretical sampling helps us to define the properties of our categories; to identify the contexts in which they are relevant; to specify the conditions under which they arise, are maintained, and vary; and to discover their consequences.' (Charmaz, 2003c p. 519)

f) integration of the theoretical framework.

Computer-assisted techniques are used in this study to offer an efficient instrument for coding, sorting, and integrating the data. NVIVO is used in this research to handle qualitative data.

Writing style:

The study attempts to evoke experiential feeling through rendering it in writing thus taking the reader into a story and imparting its mood through linguistic style and narrative exposition. This strategy removes the writing from typical scientific format without transforming the final product into fiction, drama, or poetry. Analogies and metaphors are also used to explicate tacit meanings and feelings subsumed within a category. Simple language and straightforward ideas make theory readable. The inclusion of some appropriate questions may also help tie main ideas together or redirect the reader.

4.4.2 Critical analysis of Australian Government documentation

Over the past two decades, increasing numbers of overseas students have come to Australia. In 2000, there were 153,372 international students enrolled in Australia (AEI-International Education Network, 2001). In 2003-04, a total of 171,616 visas were granted to overseas students: a 5.6 per cent increase over the previous year. Chinese background applicants accounted for almost 20% of all student visa grants offshore: of these the People's Republic of China made up 10%, Malaysia 4.1%, Hong Kong SAR 3.2%, and Singapore 2.2% (DIMIA, 2005b). The foregoing data show that the increasing trend in numbers of overseas students remains strong. To sum up, the export of Australian education has forged active links with other countries, especially Chinese background countries, from which a good number of overseas students originate.

By accepting increasing numbers of overseas students, Australia has become more widely recognised in the arena of international education, and is regarded as a safe, friendly study destination with high quality courses, said Alexander Downer, Minister for Foreign Affairs (2005). However, there are still some latent superior sentiments and attitudes resonating beneath the surface of this "friendly study destination" in the predominant "white" society, especially in distinctive policies towards students from different Chinese background countries. This study will use critical discourse analysis to explore how different national identities of Chinese background students are intentionally stipulated or delineated by DIMIA as presented in Australian official documents of student visa processing; for example: Student Visa Processing – Assessment Levels (DIMIA, 2005c), Student Visa Subclasses and Assessment Levels (DIMIA, 2004).

Critical discourse analysis (CDA) refers to the use of an ensemble of techniques for the study of textual practice and language use as social and cultural practices (Fairclough, 1992). Critical discourse analysis is a contemporary approach to the study of language and discourses in social institutions. Drawing on poststructuralist discourse theory and critical linguistics, it focuses on how social relations, identity, knowledge and power are constructed through written and spoken texts in communities, schools and classrooms. Generalisation can be perceived to create the negative stereotyping of some Chinese national identity in the policies. The main aspect of CDA advanced by Fairclough (2003) and adopted in this study is to

examine the assumptions and implicit meaning inherent in the texts about student entry assessment produced by the Australian government. Fairclough (2003, p.17) points out that it is also partly a matter of the assumptions and presuppositions people make when they speak or write. What is 'said' in a text is always said against the background of what is 'unsaid' – what is made explicit is always grounded in what is left implicit."

Chapter 5

Quantitative Analysis

5.1 Introduction

In the light of research validity and reliability, both quantitative and qualitative methods are employed in this thesis as discussed in the research methodology chapter. The quantitative part of the study is dealt with in this chapter.

Quantitative research is concerned with explaining phenomena by collecting numerical data that are analysed using mathematically based methods (in particular statistics) (Aliaga & Gunderson, 2002). In this quantitative analysis, SPSS is adopted to increase the efficiency of processing the data collected through the revised OECD questionnaire. SPSS is a statistical software package. Rather than having to calculate the mathematical equations for data analysis manually, we can use SPSS to do this. The OECD questionnaire consists of four major themes: learning strategies, motivation, self-related beliefs and learning preferences that have already been discussed in previous chapters. The questionnaire was revised for this study in order to explore the approaches to learning used by the four groups of Chinese background students.

5.2 Quantitative research objectives

In order to align the forthcoming data analysis with the research aims and objectives of the thesis, it is necessary to restate them briefly here. Three major research aims were proposed at the beginning of this research: the first one being to identify the differences of four Chinese nationals' approaches to learning; the second one to explore the national identities of the four groups of Chinese background students;

and the last to examine whether Chinese background students are continual rote-learners. Some major research objectives were: to identify and examine Chinese background students' learning approaches in Australian tertiary education discourse, by separately investigating motivation, self-related belief, learning strategies, and learning preferences; to explore the social, linguistic and educational factors affecting Chinese background students' learning in an Australian educational discourse; and to explore the national identities perceived by the Chinese background students.

The focus of this chapter is on the different Chinese nationals students' approaches to learning but it also has implications for the other objectives too. The purpose of this quantitative data analysis is to give some useful insights into the understanding of Chinese-background students' learning discourse in Australia in general, and in particular to provide some research evidence in support of the discussion of the approaches to learning used by the four groups of Chinese backgrounds students, and as quantitative methods have been frequently used by researchers to explore approaches to learning (Barker, 1993; Barron, 2004; Biggs, 1987a, 1987b; Chan, 1999; Duan, 1997).

5.3 Data processing procedure

Prior to processing the data, some adjustments must be made to the options for Questions 3, 4, 6, 7, 8, and 9 in order to increase the comparability and validity of this research. The reason for this is the insufficient numbers for some of these optional answers from the four groups of Chinese background students. Therefore, some options were grouped by related area. In Q3, 'Education' and 'Arts' were grouped as 'option 'a' Education and Arts'; 'Science/Engineering/Technology' and 'Health science' were grouped as 'option 'b' Science, Technology, Health'; and 'Law' and 'Business' were grouped as 'option 'c' Law and Business'. In Q4, 'Over two years to three years', 'Over three years to four years' and "Over four years" were grouped as 'option 'c' Over two years'. Speaking, Listening, Reading and Writing respectively for Q6, 7, 8, 9 comprise a new Q6 on English ability. As English is an integrated ability it is appropriate to group these four abilities into one, although it

was necessary to break them down into four bands when data were collected. In the new Q6, 'Weak' and 'Very weak' were grouped as 'option'd' Weak/very weak'.

The computer program SPSS (Statistical Package for the Social Sciences), which is among the most widely used programs for statistical analysis in social science (Muijs, 2004), was employed to assist in analysing this quantitative data,. The study focussed on two types of statistics: descriptive statistics and inferential statistics. The Mean, as the descriptive option for descriptive statistics would provide information about the responses of the four groups of Chinese background students to the OECD questionnaire. The Mean is defined as the sum of a series of observations divided by the number of observations in the series. It is commonly used to describe the central tendency of variables and widely recognised as the main measure (Bryman & Cramer, 2005).

Standard Deviation (SD) is also a common measure of statistical dispersion, measuring how widely spread the values are in a data set. But there is no rationale to say that all research require a measure of dispersion (Bryman & Cramer, 2005). Volatility or dispersion within or across groups is not a major point of reference for this research as the focus is the differences of approaches to learning between groups of Chinese background students in a broader sense. The main aim is to observe the differences in the mean value across these groups and it is comparison of their means that is of value in this study. Therefore, Standard Deviation is not used in this research.

Significance, as the inferential option, for inferential statistics would provide a degree of certainty that the results from the sample students can be generalised to the wider population from which these Chinese background students have been drawn, usually tested at the 0.05 level. To test the Significance of the relationships between IVs and DVs, ANOVA, and Post hoc were adopted. ANOVA (the Analysis Of VAriance) is to test more than two Means in search for relationships with significance between the Chinese background students. Once differences were found to exist among the group means, Post hoc range tests then determine which Means differ, indicating the differences on approaches to learning used by Chinese background students. In the choices of different Post hoc tests, Turkey's HSD (Honestly Significant Difference) was chosen.

The functions of SPSS are to look at the relationships between independent variables (IV) which often refer to facts and dependent variables (DV) which often refer to attitude and behaviour. Prior to the data process, 6 IVs and 12 DVs were set up. The 6 IVs started from Q1 to Q6, including Your Chinese background area, Gender, Academic Faculty, Length of Stay in Australia, Undergraduate or Postgraduate and English ability. Thus the 12 DVs ranged from Q 10 to Q55, covering all the questions designed for exploring approaches to learning. As mentioned above, comparing the Means of IV(s) and DVs which link to different approaches to learning could uncover the diversities by central tendency. Checking Significance of the relationships among these groups could identify to what extent the results of this analysis could be generalised to all of the Chinese background students from the four origins.

Data analysis falls into two parts: thorough analysis between IV of Chinese background students and all DVs at both levels, and general analysis between other IVs and all DVs but at top levels. DVs are divided into two levels, the top and the second level. The top level includes Learning Strategies, Motivation, Self-related Beliefs and Learning Preferences; the second level in fact is a subcategory of each top level, explicated in the questionnaire. To conduct a thorough analysis between Chinese background students and all DVs at both levels corresponds with the research aim and objectives to uncover approaches to learning used by the Chinese background students. Whereas, using just the top level with all other IVs is to approach the research topic by other relevant factors like gender, faculty, length of stay in Australia, undergraduate or postgraduate, and English ability in order to explore how these factors are related to, or affect the approaches to learning, and aims to add some interesting insights.

5.4 Data analysis

5.4.1 The backgrounds of participants

There were 179 participants in this study. They came from the following four countries/regions: mainland China (85 or 47.5%), Hong Kong (22 or 12.3%), Malaysia (49 or 27.4%), and Singapore (23 or 12.8%). As shown in Table 4:

Table 4: Chinese background area

		Frequency	Percent
Valid	Mainland China	85	47.5
	Hong Kong	22	12.3
	Malaysia	49	27.4
	Singapore	23	12.8
	Total	179	100.0

The Table indicates that the dominate group came from China (47%) and the lowest level of participants came from Hong Kong (22 or 12.3%), and Singapore (22 or 12.3%).

Among 179 participants, there were 85 or 47% male participants and 94 or 52.2% female participants. Generally, there was some balance between male and female participants, as shown in Table 5:

Table 5: Gender

		Frequency	Percent
Valid	Male	85	47.5
	Female	94	52.5
	Total	179	100.0

In terms of academic faculties, there were faculty groups: Education and Arts (28 or 15.6%), Science, Technology, Health (53 or 29.6%), Business and Law (98 or 54.7%). This indicates the majority of participants came from Business and Law Faculties, and the minority of participants came from Education and Arts Faculties as shown in Table 6.

Table 6: Academic Faculty

		Frequency	Percent
Valid	Education and Arts	28	15.6
	Science, Technology, Health	53	29.6
	Business, Law	98	54.7
	Total	179	100.0

With respect to the independent variable of 'Length of Stay in Australia', there were 117 participants (65.4%) with Length of Stay within one year, 36 participants

(20.1%) with Length of Stay over one year to two years, 26 participants (14.5%) with Length of Stay over two years. The largest number of participants had stayed within a year, and the smallest number of participants had stayed over two years as shown in Table 7:

Table 7: Length of Stay in Australia (up to now)

		Frequency	Percent
Valid	Within a year	117	65.4
	Over one year to two years	36	20.1
	Over two years	26	14.5
	Total	179	100.0

In regards to the independent variable of 'Undergraduate/ Postgraduate', there were 117 participants (65.4%) within undergraduate courses; there were 62 participants (34.6%) within postgraduate courses. The undergraduate students had double the number of postgraduate students, as shown in Table 8:

Table 8: Undergraduate/ Postgraduate

		Frequency	Percent
Valid	Undergraduate	117	65.4
	Postgraduate	62	34.6
	Total	179	100.0

As English ability covers four main skills: Listening, Reading, Writing and Speaking, the four skills were integrated into one variable in this data process. In regards to the independent variable of English Ability, there were 13 participants (7.3%) at Excellent Level, there were 56 participants (31.3%) at Good Level, there were 89 participants (49.7%) at Fine Level, and there were 21 participants (11.7%) at Weak/Very Weak Level. This indicates that a majority of them had average English ability, as shown in Table 9.

Table 9: English Ability:

		Frequency	Percent
Valid	Excellent	13	7.3
	Good	56	31.3

	Fine	89	49.7
	Weak/Very weak	21	11.7
	Total	179	100.0

5.4.2 Comparing means of DVs with IV of Chinese background students

In the analysis, two categories of variables were analysed: independent variables and dependent variables. The independent variables covered Chinese Background Areas, Gender, Academic Faculty, Length of Stay in Australia, English Ability. The Dependent variables were divided into four top levels: Learning Strategies, Motivation, Self-related Beliefs, and Learning Preference. Each category consists of several sub-levels. The sub-levels of Learning Strategies are: Memorisation Strategies, Elaboration Strategies, Control Strategies, Organisational Strategies, and Affective Strategies. In the top level of Motivation, there are three sub-levels: Instrumental Motivation, Interest in Reading and Effort and Persistence in Learning. In the top level of Self-related Beliefs, there are two sub-levels: Self-efficiency, and Academic Self-concept. In the top level of Learning Preferences, there are two sub-levels: Preference for Co-operative Learning, and Preference for Competitive Learning.

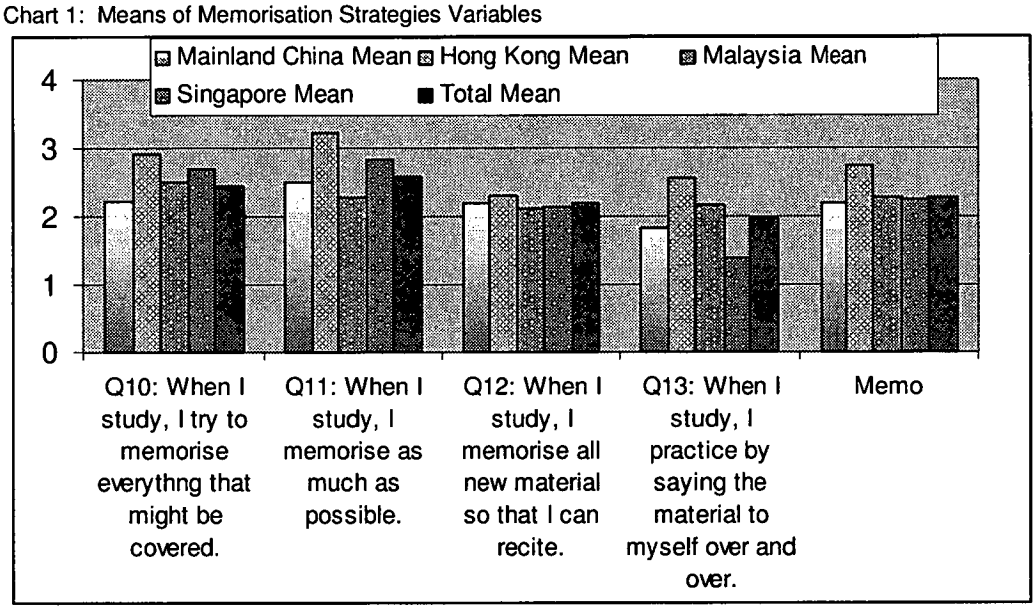
5.4.2.1 Analysis of Learning Strategies

5.4.2.1.1 Analysis of Memorisation Strategies

In the questionnaire, each scale was constructed using Likert's Measurement of Attitudes (1932), giving students a score from 1 to 4 for different responses (higher numbers representing more positive responses or higher frequency of behaviour) and taking a mean score for all the questions. There were four questions in the sub-level of Memorisation Strategies. Regarding Memorisation Strategies, four frequency categories were given: ALMOST NEVER, SOMETIMES, OFTEN, and ALMOST ALWAYS. Comparing the variables of the Chinese background students with the overall Memorisation Strategies used, the average mean (Memo) is 2.29. The mean for Hong Kong is the highest at 2.75 and the lowest mean is mainland China with 2.19, but the means for all the Chinese background students are rather consistent.

This indicates that Memorisation Strategies used by the Chinese background students was between SOMETIMES and OFTEN, in which Hong Kong students used Memorisation Strategies a little more and mainland Chinese students a little less (see Chart 1). Comparing these variables of questions, the mean for Q11 is the highest (2.58), and Q13 is the lowest (1.96), but the means are rather consistent for all four questions. This shows that generally the four questions on Memorisation Strategies had similar feedback, only the mean for Singapore on Q13 is lower at 1.39.

Chart 1: Means of Memorisation Strategies Variables



From the analysis of ANOVA on Memorisation Strategies, there is a statistically significant difference between two groups of Chinese background students, especially in Q10, Q11, Q13 and Memo (Memorisation Strategies). Statistical significant difference indicates the nature of variation or diversification of the Chinese background students. The data analysis indicates that while there is some similarity among certain groups there are also variations among other groups depending on the nature of dependent variables. However, ANOVA does not specify the groups, as shown in Table 10:

Table 10: ANOVA for Memorisation Strategies

		Sum of Squares	df	Mean Square	F	Sig.
Q10: When I study, I try to memorise	Between Groups	11.013	3	3.671	6.111	.001

everything that might be covered.	Within Groups	105.121	175	.601		
	Total	116.134	178			
Q11: When I study, I memorise as much as possible.	Between Groups	15.317	3	5.106	6.851	.000
	Within Groups	130.415	175	.745		
	Total	145.732	178			
Q12: When I study, I memorise all new material so that I can recite.	Between Groups	.669	3	.223	.406	.749
	Within Groups	96.247	175	.550		
	Total	96.916	178			
Q13: When I study, I practice by saying the material to myself over and over.	Between Groups	18.088	3	6.029	8.604	.000
	Within Groups	122.638	175	.701		
	Total	140.726	178			
Memorisation	Between Groups	5.524	3	1.841	6.494	.000
	Within Groups	49.620	175	.284		
	Total	55.144	178			

* The mean difference is significant at the .05 level.

In order to know which groups share significant relationships within this statistical significance, one needs to use Post Hoc Tests to identify the group. Turkey HSD is chosen for this task.

The result shows that for Q10, the following pairs of groups show a significant relationship:

- mainland China/Hong Kong (.001)
- Hong Kong/mainland China (.001)
- mainland China/Singapore (.04)
- Singapore/mainland China (.04)

The result shows that for Q11, the following pairs of groups show a significant relationship:

- mainland China/Hong Kong (.003)
- Hong Kong/mainland China (.003)
- Hong Kong/Malaysia (.000)
- Malaysia/Hong Kong (.000)

The result shows that for Q12, the following pairs of groups show no significant relationship.

The result shows that for Q13, the following pairs of groups show a significant relationship:

- mainland China/Hong Kong (.003)
- Hong Kong/mainland China (.003)
- Hong Kong/Singapore (.000)

- Malaysia/Hong Kong (.002)
- Hong Kong/Malaysia (.002)

The result shows that for Memo, the following pairs of groups show a significant relationship:

- mainland China/Hong Kong (.000)
- Hong Kong/mainland China (.003)
- Hong Kong/Singapore (.013)
- Singapore/Hong Kong (.013)
- Malaysia/Hong Kong (.003)
- Hong Kong/Malaysia (.003)

As shown in Table: 11

Table 11: Post Hoc Tests Turkey HSD for Memorisation Strategies

Dependent Variable	(I) Chinese background area	(J) Chinese background area	Mean Difference (I-J)	Std. Error	Sig.
Q10: When I study, I try to memorise everything that might be covered.	Mainland China	Hong Kong	-.697(*)	.185	.001
		Malaysia	-.298	.139	.143
		Singapore	-.484	.182	.042
	Hong Kong	Mainland China	.697(*)	.185	.001
		Malaysia	.399	.199	.190
		Singapore	.213	.231	.792
	Malaysia	Mainland China	.298	.139	.143
		Hong Kong	-.399	.199	.190
		Singapore	-.185	.196	.780
	Singapore	Mainland China	.484	.182	.042
		Hong Kong	-.213	.231	.792
		Malaysia	.185	.196	.780
Q11: When I study, I memorise as much as possible.	Mainland China	Hong Kong	-.721(*)	.206	.003
		Malaysia	.220	.155	.487
		Singapore	-.320	.203	.394
	Hong Kong	Mainland China	.721(*)	.206	.003
		Malaysia	.942(*)	.222	.000
		Singapore	.401	.257	.405
	Malaysia	Mainland China	-.220	.155	.487
		Hong Kong	-.942(*)	.222	.000
		Singapore	-.540	.218	.067
	Singapore	Mainland China	.320	.203	.394
		Hong Kong	-.401	.257	.405
		Malaysia	.540	.218	.067
Q12: When I study, I memorise all new material so that I can recite.	Mainland China	Hong Kong	-.118	.177	.910
		Malaysia	.078	.133	.937
		Singapore	.070	.174	.978
	Hong Kong	Mainland China	.118	.177	.910
		Malaysia	.196	.190	.733
		Singapore	.188	.221	.831
	Malaysia	Mainland China	-.078	.133	.937
		Hong Kong	-.196	.190	.733

		Singapore	-.008	.187	1.000
	Singapore	Mainland China	-.070	.174	.978
		Hong Kong	-.188	.221	.831
		Malaysia	.008	.187	1.000
Q13: When I study, I practice by saying the material to myself over and over.	Mainland China	Hong Kong	-.698(*)	.200	.003
		Malaysia	-.316	.150	.155
		Singapore	.456	.197	.098
	Hong Kong	Mainland China	.698(*)	.200	.003
		Malaysia	.382	.215	.287
		Singapore	1.154(*)	.250	.000
	Malaysia	Mainland China	.316	.150	.155
		Hong Kong	-.382	.215	.287
		Singapore	.772(*)	.212	.002
	Singapore	Mainland China	-.456	.197	.098
		Hong Kong	-1.154(*)	.250	.000
		Malaysia	-.772(*)	.212	.002
Memorisation	Mainland China	Hong Kong	-.55882(*)	.12737	.000
		Malaysia	-.07923	.09551	.840
		Singapore	-.06969	.12516	.945
	Hong Kong	Mainland China	.55882(*)	.12737	.000
		Malaysia	.47959(*)	.13666	.003
		Singapore	.48913	.15880	.013
	Malaysia	Mainland China	.07923	.09551	.840
		Hong Kong	-.47959(*)	.13666	.003
		Singapore	.00954	.13459	1.000
	Singapore	Mainland China	.06969	.12516	.945
		Hong Kong	-.48913	.15880	.013
		Malaysia	-.00954	.13459	1.000

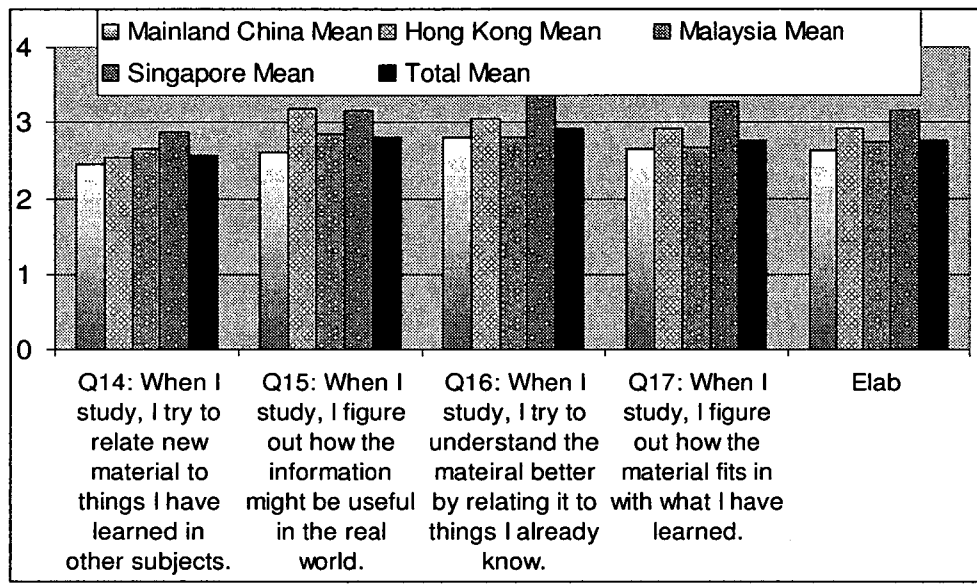
* The mean difference is significant at the .05 level.

5.4.2.1.2 Analysis of Elaboration Strategies

There were four questions in the sub-level of Memorisation Strategies. In the aspects of Elaboration Strategies, four frequency categories were given of ALMOST NEVER, SOMETIMES, OFTEN, and ALMOST ALWAYS. Comparing the variables of the Chinese background students with the overall Elaboration Strategies used, the average mean (Elab) is 2.76. The mean for Singapore is the highest at 3.16 and the lowest mean is mainland China with 2.63, but the means for all the Chinese background students are rather consistent. This indicates that Elaboration Strategies used by the Chinese background students were between SOMETIMES and OFTEN except for Singapore with OFTEN (3.16), in which Singapore Chinese background students, used Elaboration Strategies a little more and mainland Chinese students a little less. Comparing these variables of questions, the mean for Q15 is the highest (2.81), and Q14 is the lowest (2.57), but the means are rather consistent for all the four questions. This shows that generally the four questions on Elaboration Strategies

had similar feedback, only the mean for Singapore being higher on Q16 at 3.35, as shown in Chart 2.

Chart 2: Means for Elaboration Strategies



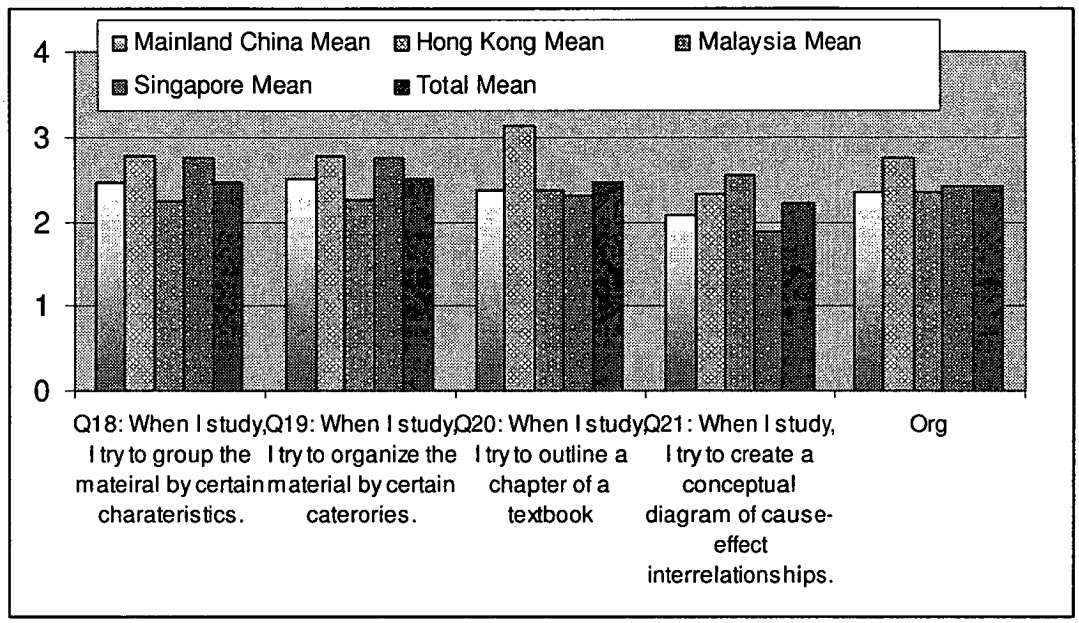
From the analysis of ANOVA on Elaboration Strategies, there is statistically no significant difference among the groups of Chinese background students in Q 14, Q15, Q16, Q17 and Elab (Elaboration Strategies).

5.4.2.1.3 Analysis of Organisation Strategies

There were four questions in the sub-level of Organisation Strategies. In the aspects of Organisation Strategies, four frequency categories were given of ALMOST NEVER, SOMETIMES, OFTEN, and ALMOST ALWAYS. Comparing the variables of the Chinese background students with the overall Organisation Strategies used, the average mean (Org) is 2.40, and the mean for Hong Kong is the highest at 2.75 and the lowest mean is mainland China with 2.35, but the means for all the Chinese background students are rather consistent. This indicates that Organisation Strategies used by the Chinese background students are at average high level, and Hong Kong background students used Organisation Strategies a little more and mainland Chinese students a little less. Comparing these variables of questions, the mean for Q19 is the highest (2.50), and Q21 is the lowest (2.21), but the means are rather consistent for all four questions. This shows that generally the

four questions on Organisation Strategies had similar feedback; only the mean for Singapore on Q21 is between ALMOST NEVER and SOMETIMES, as shown in Chart 3:

Chart 3: Means for Organisation Strategies



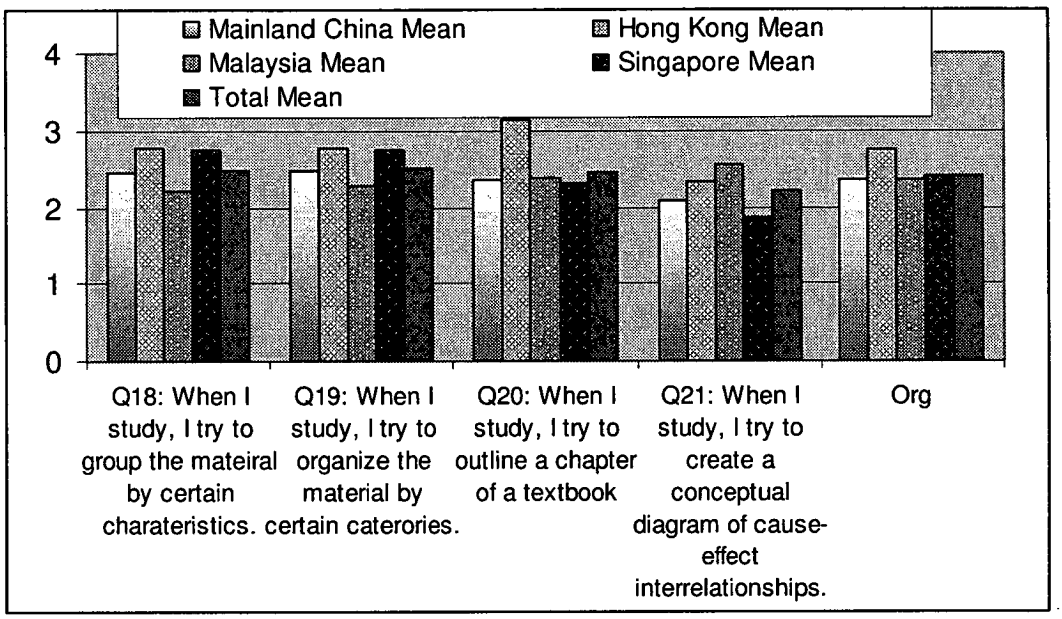
From the analysis of ANOVA on Organisation Strategies, there is statistically no significant difference among the groups of Chinese background students in Q 18, Q19, Q20, Q21 and Org.

5.4.2.1.4 Analysis of Affective Strategies

There were four questions in the sub-level of Affective Strategies. In the aspects of Affective Strategies, four frequency categories were given of ALMOST NEVER, SOMETIMES, OFTEN, and ALMOST ALWAYS. Comparing the variables of the Chinese background students with the overall Affective Strategies (Aff) used, the average mean is 2.90, and the mean for Singapore is the highest at 3.30 and the lowest mean is mainland China with 2.77, but the means for all the Chinese background students are rather consistent. This indicates that Affective Strategies used by the Chinese background students was around OFTEN, and Singaporean Chinese background students used Affective Strategies a little more and mainland Chinese students a little less. Comparing these variables of questions, the mean for Q22 is the highest (3.19), and Q25 is the lowest (2.58), but the means are rather

consistent for all four questions. This shows that generally the four questions designed according to Organisation Strategies had similar feedback, as shown in Chart 4:

Chart 4: Means for Affective Strategies



From the analysis of ANOVA on Affective Strategies, there are statistically significant differences between two groups of Chinese background students in Q23, Q25 and Aff (Affective Strategies). However, ANOVA does not specify the groups, as shown in Table 12:

Table 12: ANOVA for Affective Strategies

		Sum of Squares	df	Mean Square	F	Sig.
Q22: On weekend, I allow myself a good rest to refresh myself up	Between Groups	4.493	3	1.498	1.588	.194
	Within Groups	165.049	175	.943		
	Total	169.542	178			
Q23: I try to play or do physics exercise at intervals to reduce learning stress and increase learning effectiveness.	Between Groups	19.902	3	6.634	7.525	.000
	Within Groups	154.277	175	.882		
	Total	174.179	178			
Q24: When I study, I try to find a quiet place to study to reduce external distractions.	Between Groups	4.669	3	1.556	2.103	.102
	Within Groups	129.521	175	.740		
	Total	134.190	178			

Q25: When I study, I try to establish priorities as a way to reduce procrastination.	Between Groups	5.696	3	1.899	3.389	.019
	Within Groups	98.036	175	.560		
	Total	103.732	178			
Affective	Between Groups	7.236	3	2.412	8.876	.000
	Within Groups	47.553	175	.272		
	Total	54.789	178			

* The mean difference is significant at the .05 level.

In order to know which groups have significant relationships within this statistical significance, one needs to use Post Hoc Tests to identify the group. Turkey HSD is chosen for this task.

The result shows that for Q23, the following pairs of groups show a significant relationship:

- mainland China/Hong Kong (.002)
- Hong Kong/mainland China (.002)
- mainland China/Singapore (.002)
- Singapore/mainland China (.002)
- Hong Kong/Malaysia (.025)
- Malaysia/Hong Kong (.025)
- Malaysia/Singapore (.026)
- Singapore/Malaysia (.026)

The result shows that for Q25, the following pairs of groups show a significant relationship:

- mainland China/Singapore (.022)
- Singapore/mainland China (.022)

The result shows that for Affective, the following pairs of groups show a significant relationship:

- mainland China/Hong Kong (.007)
- Hong Kong/mainland China (.007)
- mainland China/Singapore (.000)
- Singapore/mainland China (.000)
- Malaysia/Singapore (.001)
- Singapore/Malaysia (.001)
- Hong Kong/Malaysia (.028)
- Malaysia/Hong Kong (.028)

As shown in Table 13:

Table 13: Post Hoc Tests Turkey HSD for Affective Strategies

Dependent Variable	(I) Chinese background area	(J) Chinese background area	Mean Difference (I-J)	Std. Error	Sig.
Q22: On weekend, I allow myself a good rest to refresh myself up	Mainland China	Hong Kong	-.256	.232	.688
		Malaysia	.133	.174	.872
		Singapore	-.325	.228	.485
	Hong Kong	Mainland China	.256	.232	.688
		Malaysia	.389	.249	.405
		Singapore	-.069	.290	.995
	Malaysia	Mainland China	-.133	.174	.872
		Hong Kong	-.389	.249	.405
		Singapore	-.458	.245	.247
	Singapore	Mainland China	.325	.228	.485
		Hong Kong	.069	.290	.995
		Malaysia	.458	.245	.247
Q23: I try to play or do physics exercise at intervals to reduce learning stress and increase learning effectiveness.	Mainland China	Hong Kong	-.812(*)	.225	.002
		Malaysia	-.127	.168	.875
		Singapore	-.798(*)	.221	.002
	Hong Kong	Mainland China	.812(*)	.225	.002
		Malaysia	.686	.241	.025
		Singapore	.014	.280	1.000
	Malaysia	Mainland China	.127	.168	.875
		Hong Kong	-.686	.241	.025
		Singapore	-.672	.237	.026
	Singapore	Mainland China	.798(*)	.221	.002
		Hong Kong	-.014	.280	1.000
		Malaysia	.672	.237	.026
Q24: When I study, I try to find a quiet place to study to reduce external distractions.	Mainland China	Hong Kong	-.227	.206	.687
		Malaysia	-.041	.154	.993
		Singapore	-.478	.202	.088
	Hong Kong	Mainland China	.227	.206	.687
		Malaysia	.186	.221	.833
		Singapore	-.251	.257	.762
	Malaysia	Mainland China	.041	.154	.993
		Hong Kong	-.186	.221	.833
		Singapore	-.437	.217	.188
	Singapore	Mainland China	.478	.202	.088
		Hong Kong	.251	.257	.762
		Malaysia	.437	.217	.188
Q25: When I study, I try to establish priorities as a way to reduce procrastination.	Mainland China	Hong Kong	-.326	.179	.268
		Malaysia	-.084	.134	.925
		Singapore	-.509	.176	.022
	Hong Kong	Mainland China	.326	.179	.268
		Malaysia	.242	.192	.589
		Singapore	-.184	.223	.843
	Malaysia	Mainland China	.084	.134	.925
		Hong Kong	-.242	.192	.589
		Singapore	-.426	.189	.114
	Singapore	Mainland China	.509	.176	.022
		Hong Kong	.184	.223	.843

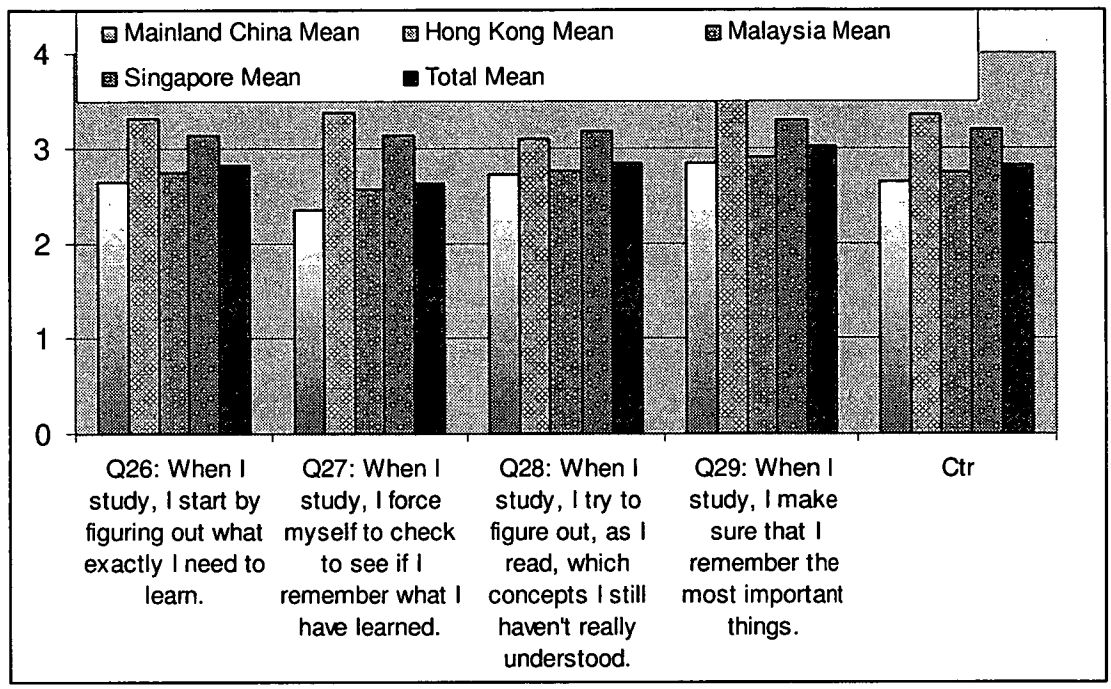
		Malaysia	.426	.189	.114
Affective	Mainland China	Hong Kong	-.40535	.12469	.007
		Malaysia	-.02965	.09350	.989
		Singapore	-.52788(*)	.12252	.000
	Hong Kong	Mainland China	.40535	.12469	.007
		Malaysia	.37570	.13378	.028
		Singapore	-.12253	.15545	.860
	Malaysia	Mainland China	.02965	.09350	.989
		Hong Kong	-.37570	.13378	.028
		Singapore	-.49823(*)	.13176	.001
	Singapore	Mainland China	.52788(*)	.12252	.000
		Hong Kong	.12253	.15545	.860
		Malaysia	.49823(*)	.13176	.001

* The mean difference is significant at the .05 level.

5.4.2.1.5 Analysis of Control Strategies

There were four questions at the sub-level of Affective Strategies. In the aspects of Control Strategies, four frequency categories were given of ALMOST NEVER, SOMETIMES, OFTEN, and ALMOST ALWAYS. Comparing the variables of the Chinese background students with the overall Control Strategies (Ctr) used, the average mean is 2.82, and the mean for Hong Kong is the highest at 3.34 and the lowest mean is mainland China with 2.63, but the means for all the Chinese background students are rather consistent. This indicates that Control Strategies used by the Chinese background students was at average high level, and Hong Kong background students used Control Strategies a little more and mainland Chinese students a little less. Comparing these variables of questions, the mean for Q29 is the highest (3.01), and Q27 is the lowest (2.83), but the means are rather consistent for all the four questions. This shows that generally the four questions on Control Strategies had similar feedback, as shown in Chart 5:

Chart 5: Means of Control Strategies Variables



From the analysis of ANOVA on Control Strategies, there is statistically significant difference among the groups of Chinese background students, especially in Q26, Q27, Q29 and Control. Statistical significant difference indicates that nature of variation or diversification of the Chinese background students. The data analysis indicates that while there is some similarity among certain groups there are also variations among other groups depending on the nature of dependent variables. However, ANOVA does not specify the groups, as shown in Table 14:

Table 14: ANOVA for Control Strategies

		Sum of Squares	df	Mean Square	F	Sig.
Q26: When I study, I start by figuring out what exactly I need to learn.	Between Groups	10.915	3	3.638	4.403	.005
	Within Groups	144.627	175	.826		
	Total	155.542	178			
Q27: When I study, I force myself to check to see if I remember what I have learned.	Between Groups	24.859	3	8.286	10.155	.000
	Within Groups	142.805	175	.816		
	Total	167.665	178			
Q28: When I study, I try to figure out, as I read, which concepts I still haven't	Between Groups	5.565	3	1.855	2.264	.083
	Within Groups	143.407	175	.819		

really understood.	Total	148.972	178			
Q29: When I study, I make sure that I remember the most important things.	Between Groups	12.623	3	4.208	5.031	.002
	Within Groups	146.372	175	.836		
	Total	158.994	178			
Control	Between Groups	12.338	3	4.113	7.543	.000
	Within Groups	95.414	175	.545		
	Total	107.752	178			

* The mean difference is significant at the .05 level.

In order to know which groups have significant relationships within this statistical significance, one needs to use Post Hoc Tests to identify the group. Turkey HSD is chosen for this task.

The result shows that for Q26, the following pairs of groups show a significant relationship:

- mainland China/Hong Kong (.011)
- Hong Kong/mainland China (.011)

The result shows that for Q27, the following pairs of groups show a significant relationship:

- mainland China/Hong Kong (.000)
- mainland China/Singapore (.002)
- Hong Kong/mainland China (.000)
- Hong Kong/Malaysia (.004)
- Malaysia/Hong Kong (.004)
- Singapore/mainland China (.002)

The result shows that for Q29, the following pairs of groups show a significant relationship:

- mainland China/Hong Kong (.004)
- Hong Kong/mainland China (.004)
- Hong Kong/Malaysia (.019)
- Malaysia/Hong Kong (.019)

The result shows that for Ctr, the following pairs of groups show a significant relationship:

- mainland China/Hong Kong (.001)
- Hong Kong/mainland China (.001)
- Malaysia/Singapore (.009)
- Singapore/Malaysia (.009)
- Hong Kong/Malaysia (.010)

- Malaysia/Hong Kong (.010)

As shown in Table15:

Table 15: Post Hoc Tests Turkey HSD for Control Strategies

Dependent Variable	(I) Chinese background area	(J) Chinese background area	Mean Difference (I-J)	Std. Error	Sig.
Q26: When I study, I start by figuring out what exactly I need to learn.	Mainland China	Hong Kong	-.683	.217	.011
		Malaysia	-.099	.163	.929
		Singapore	-.495	.214	.098
	Hong Kong	Mainland China	.683	.217	.011
		Malaysia	.583	.233	.063
		Singapore	.188	.271	.900
	Malaysia	Mainland China	.099	.163	.929
		Hong Kong	-.583	.233	.063
		Singapore	-.396	.230	.315
	Singapore	Mainland China	.495	.214	.098
		Hong Kong	-.188	.271	.900
		Malaysia	.396	.230	.315
Q27: When I study, I force myself to check to see if I remember what I have learned.	Mainland China	Hong Kong	-1.022(*)	.216	.000
		Malaysia	-.230	.162	.488
		Singapore	-.789(*)	.212	.002
	Hong Kong	Mainland China	1.022(*)	.216	.000
		Malaysia	.792(*)	.232	.004
		Singapore	.233	.269	.823
	Malaysia	Mainland China	.230	.162	.488
		Hong Kong	-.792(*)	.232	.004
		Singapore	-.559	.228	.072
	Singapore	Mainland China	.789(*)	.212	.002
		Hong Kong	-.233	.269	.823
		Malaysia	.559	.228	.072
Q28: When I study, I try to Table out, as I read, which concepts I still haven't really understood.	Mainland China	Hong Kong	-.373	.217	.314
		Malaysia	-.037	.162	.996
		Singapore	-.456	.213	.143
	Hong Kong	Mainland China	.373	.217	.314
		Malaysia	.336	.232	.473
		Singapore	-.083	.270	.990
	Malaysia	Mainland China	.037	.162	.996
		Hong Kong	-.336	.232	.473
		Singapore	-.419	.229	.263
	Singapore	Mainland China	.456	.213	.143
		Hong Kong	.083	.270	.990
		Malaysia	.419	.229	.263
Q29: When I study, I make sure that I remember the most important things.	Mainland China	Hong Kong	-.756(*)	.219	.004
		Malaysia	-.063	.164	.981
		Singapore	-.469	.215	.132
	Hong Kong	Mainland China	.756(*)	.219	.004
		Malaysia	.693	.235	.019
		Singapore	.287	.273	.720
	Malaysia	Mainland China	.063	.164	.981
		Hong Kong	-.693	.235	.019
		Singapore	-.406	.231	.297

	Singapore	Mainland China	.469	.215	.132
		Hong Kong	-.287	.273	.720
		Malaysia	.406	.231	.297
Control	Mainland China	Hong Kong	-.70856(*)	.17663	.001
		Malaysia	-.10744	.13244	.849
		Singapore	-.55243	.17355	.009
	Hong Kong	Mainland China	.70856(*)	.17663	.001
		Malaysia	.60111	.18950	.010
		Singapore	.15613	.22020	.893
	Malaysia	Mainland China	.10744	.13244	.849
		Hong Kong	-.60111	.18950	.010
		Singapore	-.44499	.18663	.084
	Singapore	Mainland China	.55243	.17355	.009
		Hong Kong	-.15613	.22020	.893
		Malaysia	.44499	.18663	.084

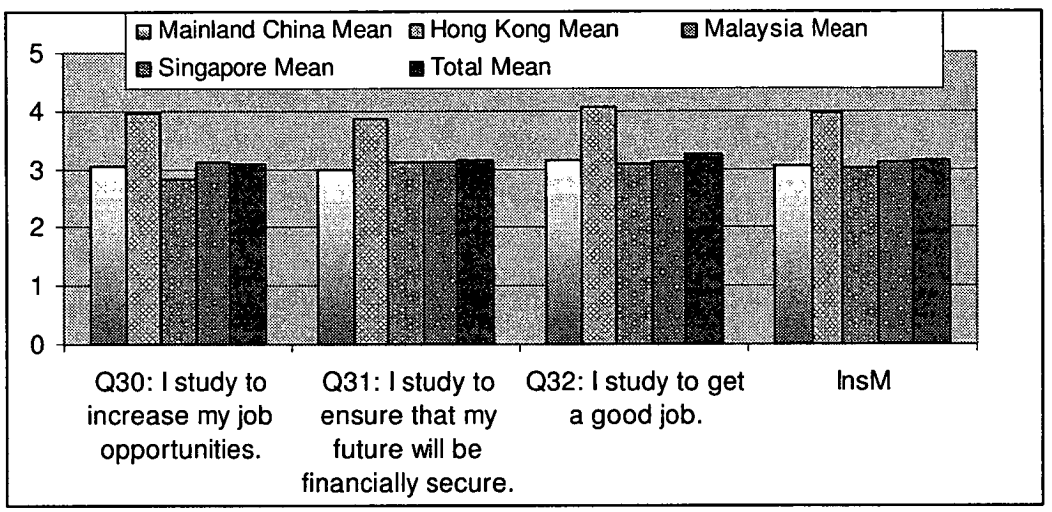
* The mean difference is significant at the .05 level.

5.4.2.2 Analysis of Motivation

5.4.2.2.1 Analysis of Instrumental Motivation

There were three questions in the sub-level of Instrumental Motivation. In the aspects of Instrumental Motivation, four frequency categories were given of ALMOST NEVER, SOMETIMES, OFTEN, and ALMOST ALWAYS. Comparing the variables of the Chinese background students with the overall Instrumental Motivation (InsM) used, the average mean is 3.16, and the mean for Hong Kong is the highest at 3.94 and the lowest mean is mainland China with 3.05, but the means for all the Chinese background students are rather consistent. This indicates that Instrumental Motivation used by the Chinese background students was within OFTEN, in which Hong Kong students used Instrumental Motivation a little more and mainland Chinese students a little less. Comparing these variables of questions, the mean for Q32 is the highest (3.24), and Q30 is the lowest (3.10), but the means are rather consistent for all the three questions. This shows that generally the three questions on Instrumental Motivation had similar feedback; only the mean for Singapore on Q 32 reaches the scale of ALMOST ALWAYS (4.05), as shown in Chart 6:

Chart 6: Means for Instrumental Motivation



From the analysis of ANOVA on Instrumental Motivation, there is statistically significant difference among the groups of Chinese background students in Q30, Q31, Q32 and InsM. Statistical significant difference indicates that nature of variation or diversification of the Chinese background students. The data analysis indicates while that is some similarity among certain groups there are also variations among other groups depending on the nature of dependent variables. However, ANOVA does not specify the groups, as shown in Table 16:

Table 16: ANOVA of Instrumental Motivation Variables

		Sum of Squares	df	Mean Square	F	Sig.
Q30: I study to increase my job opportunities.	Between Groups	20.386	3	6.795	5.893	.001
	Within Groups	201.804	175	1.153		
	Total	222.190	178			
Q31: I study to ensure that my future will be financially secure.	Between Groups	13.474	3	4.491	3.202	.025
	Within Groups	245.453	175	1.403		
	Total	258.927	178			
Q32: I study to get a good job.	Between Groups	16.311	3	5.437	4.749	.003
	Within Groups	200.359	175	1.145		
	Total	216.670	178			
Instrumental Motivation	Between Groups	15.895	3	5.298	5.108	.002
	Within Groups	181.520	175	1.037		
	Total	197.415	178			

* The mean difference is significant at the .05 level.

In order to know which groups within this statistical significance have significant relationships, one needs to use Post Hoc Tests to identify the group. Turkey HSD is chosen for this task.

The result shows that for Q30, the following pairs of groups show a significant relationship:

- mainland China/Hong Kong (.003)
- Hong Kong/mainland China (.003)
- Hong Kong/Malaysia (.000)
- Malaysia/Hong Kong (.000)

The result shows that for Q31, the following pairs of groups show a significant relationship:

- mainland China/Hong Kong (.012)
- Hong Kong/mainland China (.012)

The result shows that for Q32, the following pairs of groups show a significant relationship:

- mainland China/Hong Kong (.003)
- Hong Kong/mainland China (.003)
- Hong Kong/Malaysia (.004)
- Hong Kong/Singapore (.024)
- Singapore/Hong Kong (.024)

The result shows that for InsM, the following pairs of groups show a significant relationship:

- mainland China/Hong Kong (.002)
- Hong Kong/mainland China (.002)
- Hong Kong/Malaysia (.002)
- Malaysia/Hong Kong (.002)
- Hong Kong/Singapore (.036)
- Singapore/Hong Kong (.036)

As shown in Table17:

Table 17: Post Hoc Test Turkey HSD for Instrumental Motivation

Dependent Variable	(I) Chinese background area	(J) Chinese background area	Mean Difference (I-J)	Std. Error	Sig.
Q30: I study to increase my job opportunities.	Mainland China	Hong Kong	-.919(*)	.257	.003
		Malaysia	.219	.193	.667
		Singapore	-.095	.252	.982
	Hong Kong	Mainland China	.919(*)	.257	.003

		Malaysia	1.138(*)	.276	.000
		Singapore	.824	.320	.053
	Malaysia	Mainland China	-.219	.193	.667
		Hong Kong	-1.138(*)	.276	.000
		Singapore	-.314	.271	.655
	Singapore	Mainland China	.095	.252	.982
		Hong Kong	-.824	.320	.053
		Malaysia	.314	.271	.655
Q31: I study to ensure that my future will be financially secure.	Mainland China	Hong Kong	-.875	.283	.012
		Malaysia	-.134	.212	.922
		Singapore	-.142	.278	.956
	Hong Kong	Mainland China	.875	.283	.012
		Malaysia	.741	.304	.074
		Singapore	.733	.353	.165
	Malaysia	Mainland China	.134	.212	.922
		Hong Kong	-.741	.304	.074
		Singapore	-.008	.299	1.000
	Singapore	Mainland China	.142	.278	.956
		Hong Kong	-.733	.353	.165
		Malaysia	.008	.299	1.000
Q32: I study to get a good job.	Mainland China	Hong Kong	-.904(*)	.256	.003
		Malaysia	.039	.192	.997
		Singapore	.011	.251	1.000
	Hong Kong	Mainland China	.904(*)	.256	.003
		Malaysia	.943(*)	.275	.004
		Singapore	.915	.319	.024
	Malaysia	Mainland China	-.039	.192	.997
		Hong Kong	-.943(*)	.275	.004
		Singapore	-.028	.270	1.000
	Singapore	Mainland China	-.011	.251	1.000
		Hong Kong	-.915	.319	.024
		Malaysia	.028	.270	1.000
Instrumental Motivation	Mainland China	Hong Kong	-.89964(*)	.24362	.002
		Malaysia	.04130	.18268	.996
		Singapore	-.07553	.23938	.989
	Hong Kong	Mainland China	.89964(*)	.24362	.002
		Malaysia	.94094(*)	.26137	.002
		Singapore	.82411	.30372	.036
	Malaysia	Mainland China	-.04130	.18268	.996
		Hong Kong	-.94094(*)	.26137	.002
		Singapore	-.11683	.25742	.969
	Singapore	Mainland China	.07553	.23938	.989
		Hong Kong	-.82411	.30372	.036
		Malaysia	.11683	.25742	.969

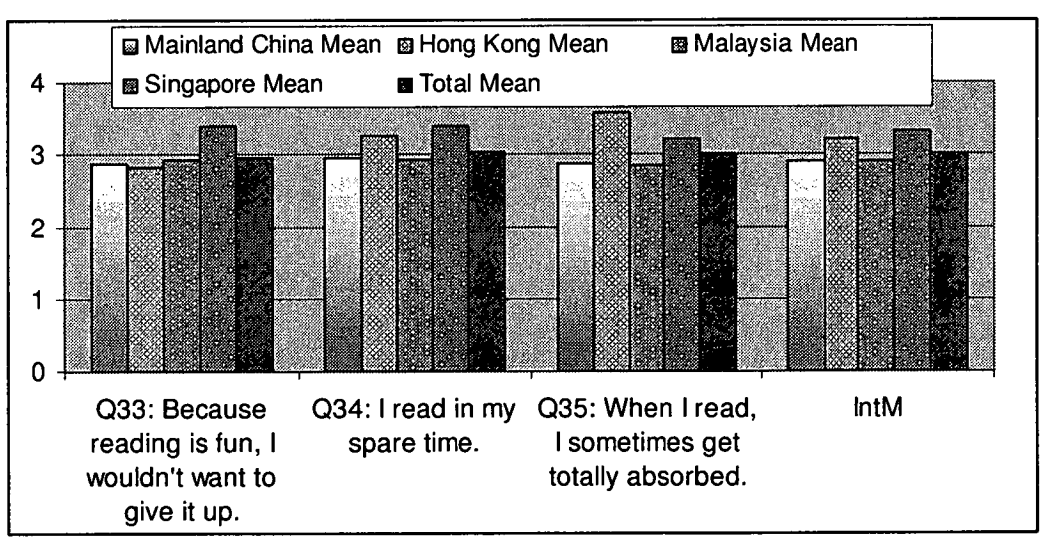
* The mean difference is significant at the .05 level.

5.4.2.2.2 Analysis of Interest in Reading

There were three questions at the sub-level of Interest in Reading. In the aspects of Interest in Reading, four frequency categories were given of DISAGREE, DISAGREE SOMEWHAT, AGREE SOMEWHAT AND AGREE. In the case of questions requiring agreement or disagreement, 2.5 represents a point of "neutrality",

since responses 1 and 2 are negative (disagreement) and 3 and 4 are positive (agreement). In these cases students with above 2.5 could be said to have positive learning characteristics or attitudes and those with below to have negative characteristics or attitudes. Comparing the variables of the Chinese background students with the overall Interest in Reading (IntM) used, the average mean is 3.00. The mean for Singapore is the highest of 3.33 and the lowest mean is mainland China with 2.90, but the means for all the Chinese background students are rather consistent. This indicates that Interest in Reading used by the Chinese background students was positive, none of them showed an overall lack of interest in reading, and Hong Kong students showed Interest in Reading to be a little more and mainland Chinese students Interest in Reading to be a little less. Comparing these variables of questions, the means are rather consistent for all the three questions. This shows that generally the three questions on Interest in Reading had similar feedback, as shown in Chart 7:

Chart 7: Means of Interest in Reading



From the analysis of ANOVA on Interest in Reading, there is statistically no significant difference among the groups of Chinese background students, as shown in Table 18:

Table 18: ANOVA for Interest in Reading

		Sum of Squares	df	Mean Square	F	Sig.
Q33: Because reading is	Between Groups	5.404	3	1.801	1.53	.207

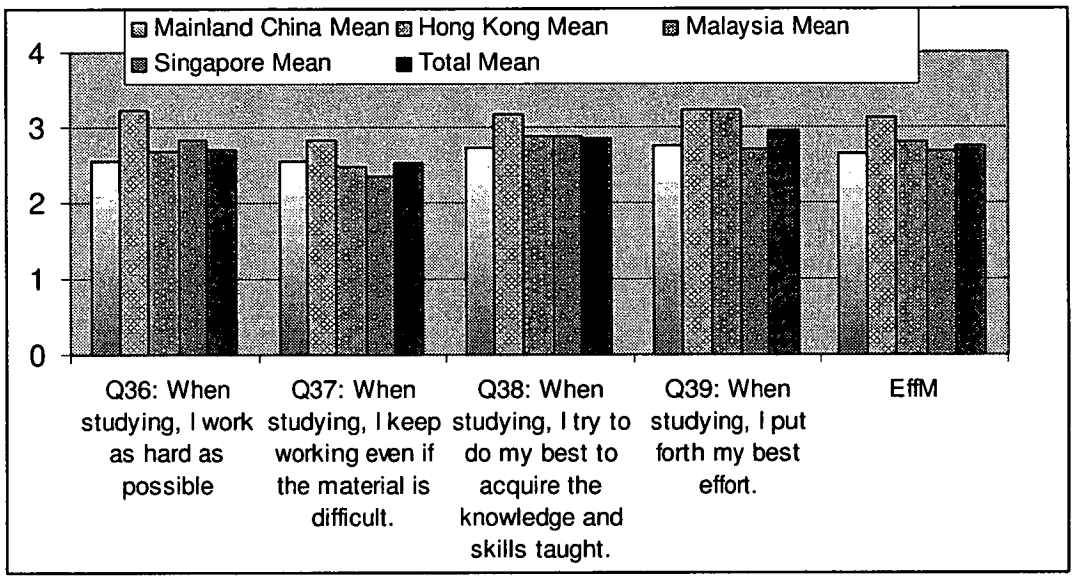
fun, I wouldn't want to give it up.					7	
	Within Groups	205.144	175	1.172		
	Total	210.547	178			
Q34: I read in my spare time.	Between Groups	5.233	3	1.744	1.508	.214
	Within Groups	202.409	175	1.157		
	Total	207.642	178			
Q35: When I read, I sometimes get totally absorbed.	Between Groups	11.192	3	3.731	2.853	.039
	Within Groups	228.808	175	1.307		
	Total	240.000	178			
Interest in Reading	Between Groups	4.953	3	1.651	1.726	.163
	Within Groups	167.380	175	.956		
	Total	172.333	178			

* The mean difference is significant at the .05 level.

5.4.2.2.3 Analysis of Effort and Persistence in Learning

There were four questions in the sub-level of Effort and Persistence. In the aspects of Effort and Persistence in Learning, four frequency categories were given of ALMOST NEVER, SOMETIMES, OFTEN, and ALMOST ALWAYS. Comparing the variables of the Chinese background students with the overall Effort and Persistence in Learning (EffM) used, the average mean is 2.75, and the mean for Hong Kong is the highest at 3.11 and the lowest mean is mainland China with 2.64. The means all the Chinese background students are rather consistent except for Hong Kong. This indicates that Effort and Persistence in Learning used by the Chinese background students was at average level, but Hong Kong students were at average high level. Comparing these variables of the questions, the mean for Q39 is the highest (2.94), and Q37 is the lowest (2.53), but the means are rather consistent for all the four questions. This shows that generally the four questions on Effort and Persistence in Learning had similar feedback; as shown in Chart 8:

Chart 8: Means for Effort and Persistence in Learning



From the analysis of ANOVA on Effort and Persistence in Learning, there is a statistically significant difference among the groups of Chinese background students in Q36 and Moti (Motivation). However, ANOVA does not specify the groups, as shown in Table 19:

Table 19: ANOVA for Effort and Persistence in Learning

		Sum of Squares	df	Mean Square	F	Sig.
Q36: When studying, I work as hard as possible	Between Groups	8.660	3	2.887	3.582	.015
	Within Groups	141.049	175	.806		
	Total	149.709	178			
Q37: When studying, I keep working even if the material is difficult.	Between Groups	2.781	3	.927	1.028	.382
	Within Groups	157.800	175	.902		
	Total	160.581	178			
Q38: When studying, I try to do my best to acquire the knowledge and skills taught.	Between Groups	3.697	3	1.232	1.686	.172
	Within Groups	127.923	175	.731		
	Total	131.620	178			
Q39: When studying, I put forth my best effort.	Between Groups	9.766	3	3.255	2.583	.055
	Within Groups	220.558	175	1.260		
	Total	230.324	178			
Effort and Persistence in Learning	Between Groups	4.142	3	1.381	2.202	.090
	Within Groups	109.731	175	.627		
	Total	113.874	178			

* The mean difference is significant at the .05 level.

In order to know which groups have a significant relationship within this statistical significance, one needs to use Post Hoc Tests to identify the group. Turkey HSD is chosen for this task.

The result shows that for Q36, the following pairs of groups show a significant relationship:

- mainland China/Hong Kong (.009)
- Hong Kong/mainland China (.009)

The result shows that for Effort and Persistence in Learning, the following pairs of groups show a significant relationship:

- Hong Kong/Malaysia (.021)
- Malaysia/Hong Kong (.021)

Shown in Table 20:

Table 20: Post Hoc Turkey HSD for Effort and Persistence in Learning

Dependent Variable	(I) Chinese background area	(J) Chinese background area	Mean Difference (I-J)	Std. Error	Sig.
Q36: When studying, I work as hard as possible	Mainland China	Hong Kong	-.686(*)	.215	.009
		Malaysia	-.132	.161	.844
		Singapore	-.285	.211	.532
	Hong Kong	Mainland China	.686(*)	.215	.009
		Malaysia	.554	.230	.080
		Singapore	.401	.268	.441
	Malaysia	Mainland China	.132	.161	.844
		Hong Kong	-.554	.230	.080
		Singapore	-.153	.227	.907
	Singapore	Mainland China	.285	.211	.532
		Hong Kong	-.401	.268	.441
		Malaysia	.153	.227	.907
Q37: When studying, I keep working even if the material is difficult.	Mainland China	Hong Kong	-.277	.227	.615
		Malaysia	.072	.170	.975
		Singapore	.193	.223	.822
	Hong Kong	Mainland China	.277	.227	.615
		Malaysia	.349	.244	.482
		Singapore	.470	.283	.348
	Malaysia	Mainland China	-.072	.170	.975
		Hong Kong	-.349	.244	.482
		Singapore	.122	.240	.957
	Singapore	Mainland China	-.193	.223	.822
		Hong Kong	-.470	.283	.348
		Malaysia	-.122	.240	.957
Q38: When studying, I try to do my best to acquire the knowledge and skills taught.	Mainland China	Hong Kong	-.452	.205	.124
		Malaysia	-.148	.153	.769
		Singapore	-.140	.201	.898
	Hong Kong	Mainland China	.452	.205	.124

		Malaysia	.304	.219	.509
		Singapore	.312	.255	.612
	Malaysia	Mainland China	.148	.153	.769
		Hong Kong	-.304	.219	.509
		Singapore	.008	.216	1.000
	Singapore	Mainland China	.140	.201	.898
		Hong Kong	-.312	.255	.612
		Malaysia	-.008	.216	1.000
Q39: When studying, I put forth my best effort.	Mainland China	Hong Kong	-.463	.269	.315
		Malaysia	-.460	.201	.106
		Singapore	.069	.264	.994
	Hong Kong	Mainland China	.463	.269	.315
		Malaysia	.003	.288	1.000
		Singapore	.532	.335	.388
	Malaysia	Mainland China	.460	.201	.106
		Hong Kong	-.003	.288	1.000
		Singapore	.529	.284	.248
	Singapore	Mainland China	-.069	.264	.994
		Hong Kong	-.532	.335	.388
		Malaysia	-.529	.284	.248
Effort and Persistence in Learning	Mainland China	Hong Kong	-.56482(*)	.16668	.005
		Malaysia	-.04287	.12499	.986
		Singapore	-.18252	.16378	.681
	Hong Kong	Mainland China	.56482(*)	.16668	.005
		Malaysia	.52195(*)	.17883	.021
		Singapore	.38230	.20780	.258
	Malaysia	Mainland China	.04287	.12499	.986
		Hong Kong	-.52195(*)	.17883	.021
		Singapore	-.13965	.17613	.858
	Singapore	Mainland China	.18252	.16378	.681
		Hong Kong	-.38230	.20780	.258
		Malaysia	.13965	.17613	.858

* The mean difference is significant at the .05 level.

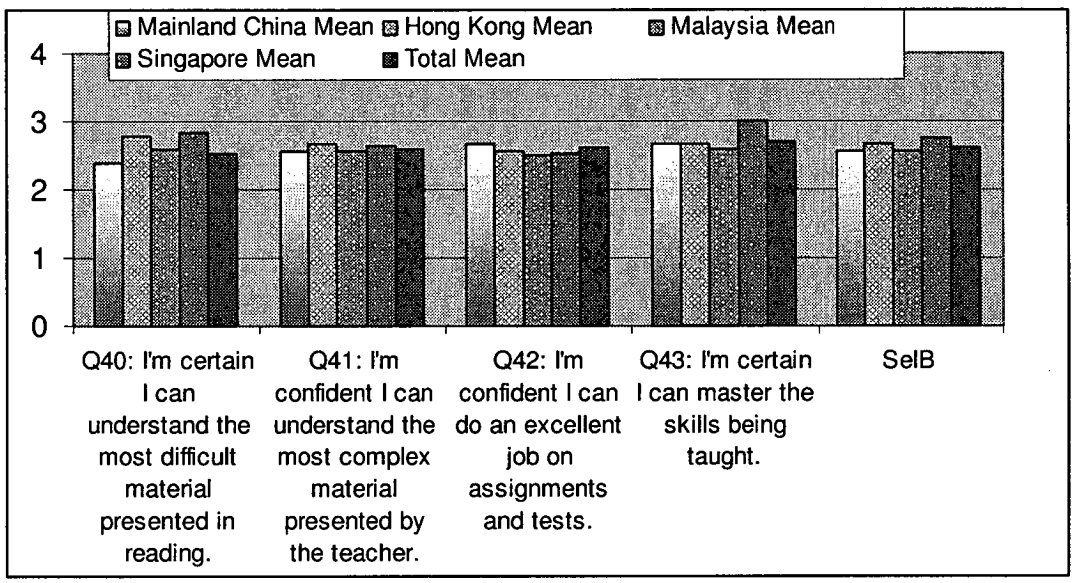
5.4.2.3 Analysis of Self-related Beliefs

5.4.2.3.1 Self-efficacy

There were four questions in the sub-level of Self-efficacy. In the aspects of Self-efficacy in Learning, four frequency categories were given of ALMOST NEVER, SOMETIMES, OFTEN, and ALMOST ALWAYS. Comparing the variables of the Chinese background students with the overall Self-efficacy (SelB) used, the average mean is 2.60. The mean for Singapore is the highest of 2.75 and the lowest mean is mainland China with 2.56, but the means for all the Chinese background students are rather consistent. This indicates that Self-efficacy used by the Chinese background students was between SOMETIMES and OFTEN, and Singaporean Chinese students used Self-efficacy a little more and Malaysian Chinese students a little less.

Comparing these variables of the questions, the mean for Q43 is the highest (2.69), and Q40 is the lowest (2.54), but the means are rather consistent for all the four questions. This shows that generally the four questions on Self-efficacy had similar feedback; only the mean for Singapore on Q 43 is completely within OFTEN (3.00), as shown in Chart 9:

Chart 9: Means for Self-efficacy



From the analysis of ANOVA on Self-efficacy, there is statistically significant difference among the groups of Chinese background students in Q40. However, ANOVA does not specify the groups, as shown in Table 21:

Table 21: ANOVA for Self-effect

		Sum of Squares	df	Mean Square	F	Sig.
Q40: I'm certain I can understand the most difficult material presented in reading.	Between Groups	5.393	3	1.798	2.781	.043
	Within Groups	113.121	175	.646		
	Total	118.514	178			
Q41: I'm confident I can understand the most complex material presented by the teacher.	Between Groups	.451	3	.150	.221	.882
	Within Groups	119.124	175	.681		
	Total	119.575	178			
Q42: I'm confident I can do an excellent job on assignments and tests.	Between Groups	1.177	3	.392	.120	.948
	Within Groups	569.862	175	3.256		
	Total	571.039	178			
Q43: I'm certain I can master the skills being taught.	Between Groups	2.765	3	.922	.859	.463
	Within Groups	187.715	175	1.073		

	Total	190.480	178			
Self-efficacy	Between Groups	.810	3	.270	.428	.733
	Within Groups	110.380	175	.631		
	Total	111.190	178			

* The mean difference is significant at the .05 level.

In order to know which groups have a significant relationship within this statistical significance, one needs to use Post Hoc Tests to identify the group. Turkey HSD is chosen for this task. However, the result shows that for Q40, no pair of groups has a significant relationship.

Shown in Table 22

Table 22: Post Hoc Turkey HSD for Self-efficacy

Dependent Variable	(I) Chinese background area	(J) Chinese background area	Mean Difference (I-J)	Std. Error	Sig.
Q40: I'm certain I can understand the most difficult material presented in reading.	Mainland China	Hong Kong	-.396	.192	.170
		Malaysia	-.195	.144	.531
		Singapore	-.450	.189	.085
	Hong Kong	Mainland China	.396	.192	.170
		Malaysia	.201	.206	.764
		Singapore	-.053	.240	.996
	Malaysia	Mainland China	.195	.144	.531
		Hong Kong	-.201	.206	.764
		Singapore	-.255	.203	.594
	Singapore	Mainland China	.450	.189	.085
		Hong Kong	.053	.240	.996
		Malaysia	.255	.203	.594
Q41: I'm confident I can understand the most complex material presented by the teacher.	Mainland China	Hong Kong	-.129	.197	.914
		Malaysia	.002	.148	1.000
		Singapore	-.099	.194	.956
	Hong Kong	Mainland China	.129	.197	.914
		Malaysia	.131	.212	.926
		Singapore	.030	.246	.999
	Malaysia	Mainland China	-.002	.148	1.000
		Hong Kong	-.131	.212	.926
		Singapore	-.101	.209	.962
	Singapore	Mainland China	.099	.194	.956
		Hong Kong	-.030	.246	.999
		Malaysia	.101	.209	.962
Q42: I'm confident I can do an excellent job on assignments and tests.	Mainland China	Hong Kong	.137	.432	.989
		Malaysia	.172	.324	.951
		Singapore	.161	.424	.981
	Hong Kong	Mainland China	-.137	.432	.989
		Malaysia	.035	.463	1.000
		Singapore	.024	.538	1.000
	Malaysia	Mainland China	-.172	.324	.951
		Hong Kong	-.035	.463	1.000
		Singapore	-.012	.456	1.000
	Singapore	Mainland China	-.161	.424	.981

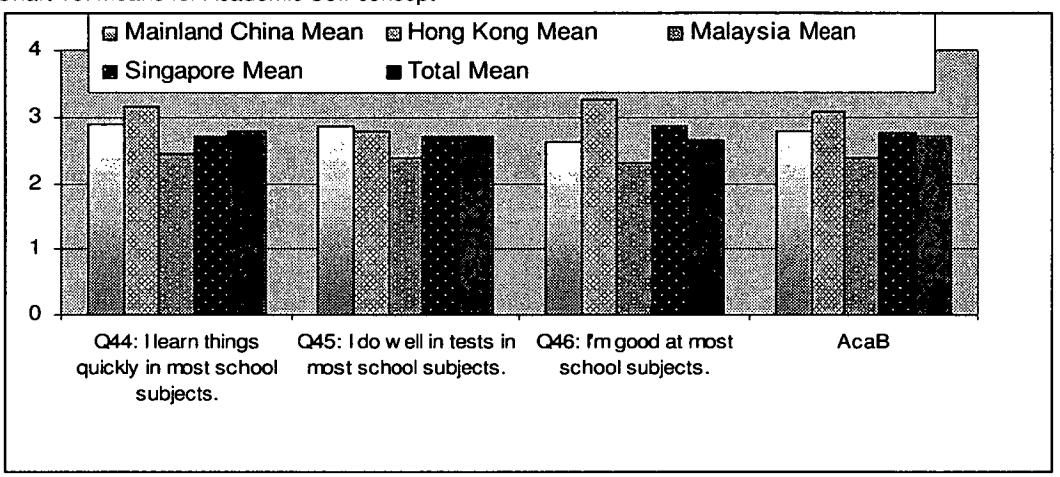
		Hong Kong	-.024	.538	1.000
		Malaysia	.012	.456	1.000
Q43: I'm certain I can master the skills being taught.	Mainland China	Hong Kong	-.023	.248	1.000
		Malaysia	.067	.186	.984
		Singapore	-.341	.243	.500
	Hong Kong	Mainland China	.023	.248	1.000
		Malaysia	.090	.266	.987
		Singapore	-.318	.309	.732
	Malaysia	Mainland China	-.067	.186	.984
		Hong Kong	-.090	.266	.987
		Singapore	-.408	.262	.405
	Singapore	Mainland China	.341	.243	.500
		Hong Kong	.318	.309	.732
		Malaysia	.408	.262	.405
Self-efficacy	Mainland China	Hong Kong	-.10281	.18998	.949
		Malaysia	.01152	.14245	1.000
		Singapore	-.18235	.18667	.763
	Hong Kong	Mainland China	.10281	.18998	.949
		Malaysia	.11433	.20382	.943
		Singapore	-.07955	.23684	.987
	Malaysia	Mainland China	-.01152	.14245	1.000
		Hong Kong	-.11433	.20382	.943
		Singapore	-.19388	.20074	.769
	Singapore	Mainland China	.18235	.18667	.763
		Hong Kong	.07955	.23684	.987
		Malaysia	.19388	.20074	.769

5.4.2.3.2 Academic Self-concept

There were three questions in the sub-level of Academic Self-concept. In the aspects of Academic Self-concept, four frequency categories were given of DISAGREE, DISAGREE SOMEWHAT, AGREE SOMEWHAT AND AGREE. In the case of questions requiring agreement or disagreement, 2.5 represents a point of "neutrality", since responses 1 and 2 are negative (disagreement), and 3 and 4 are positive (agreement). In this case students with above 2.5 could be said to have positive learning characteristics or attitudes and those with below to have negative characteristics or attitudes. Comparing the variables of the Chinese background students with the overall Academic Self-concept (AcaB) used by them, the average mean is 2.70. The mean for Hong Kong is the highest at 3.06 and the lowest mean is Malaysia with 2.38, but the means for all the Chinese background students are rather consistent. This indicates that Academic Self-concept used by the overall Chinese background students was positive. However Malaysian Chinese students scored below 2.5 indicating a negative self-concept, i.e., little confidence in their ability to

master particular school tasks. Mainland Chinese showed a strong Academic Self-concept (2.78). Comparing these variables of questions, the means are rather consistent for all three questions. This shows that generally the three questions on Academic Self-concept had similar feedback, as shown in Chart 10:

Chart 10: Means for Academic Self-concept



From the analysis of ANOVA on Academic Self-concept, there is statistically significant difference among the groups of Chinese background students in Q44, Q46 and Academic Self-concept. However, ANOVA does not specify the groups, as shown in Table 23:

Table 23: ANOVA for Academic Self-concept

		Sum of Squares	df	Mean Square	F	Sig.
Q44: I learn things quickly in most school subjects.	Between Groups	9.202	3	3.067	2.849	.039
	Within Groups	188.406	175	1.077		
	Total	197.609	178			
Q45: I do well in tests in most school subjects.	Between Groups	6.723	3	2.241	1.947	.124
	Within Groups	201.378	175	1.151		
	Total	208.101	178			
Q46: I'm good at most school subjects.	Between Groups	15.549	3	5.183	4.456	.005
	Within Groups	203.569	175	1.163		
	Total	219.117	178			
Academic Self-concept	Between Groups	8.463	3	2.821	2.741	.045
	Within Groups	180.090	175	1.029		
	Total	188.554	178			

* The mean difference is significant at the .05 level.

In order to know which groups have significant relationships within this statistical significance, one needs to use Post Hoc Tests to identify the group. Turkey HSD is chosen for this task.

The result shows that for Q44, no pair of groups shows a significant relationship:
The result shows that for Q46, the following pairs of groups show a significant relationship:

- Hong Kong/Malaysia (.003)
- Malaysia/Hong Kong (.003)

The result shows that for Academic Self-concept, the following pairs of groups show a significant relationship:

- Hong Kong/Malaysia (.048)
- Malaysia/Hong Kong (.048)

As shown in Table: 24

Table 24: Post Hoc Test Turkey HSD for Academic Self-concept

Dependent Variable	(I) Chinese background area	(J) Chinese background area	Mean Difference (I-J)	Std. Error	Sig.
Q44: I learn things quickly in most school subjects.	Mainland China	Hong Kong	-.254	.248	.736
		Malaysia	.433	.186	.096
		Singapore	.187	.244	.870
	Hong Kong	Mainland China	.254	.248	.736
		Malaysia	.687	.266	.052
		Singapore	.441	.309	.486
	Malaysia	Mainland China	-.433	.186	.096
		Hong Kong	-.687	.266	.052
		Singapore	-.247	.262	.783
	Singapore	Mainland China	-.187	.244	.870
		Hong Kong	-.441	.309	.486
		Malaysia	.247	.262	.783
Q45: I do well in tests in most school subjects.	Mainland China	Hong Kong	.074	.257	.992
		Malaysia	.459	.192	.083
		Singapore	.151	.252	.932
	Hong Kong	Mainland China	-.074	.257	.992
		Malaysia	.385	.275	.502
		Singapore	.077	.320	.995
	Malaysia	Mainland China	-.459	.192	.083
		Hong Kong	-.385	.275	.502
		Singapore	-.308	.271	.668
	Singapore	Mainland China	-.151	.252	.932
		Hong Kong	-.077	.320	.995
		Malaysia	.308	.271	.668
Q46: I'm good at most school subjects.	Mainland China	Hong Kong	-.661	.258	.054
		Malaysia	.306	.193	.393
		Singapore	-.258	.253	.740
	Hong Kong	Mainland China	.661	.258	.054
		Malaysia	.967(*)	.277	.003
		Singapore	.403	.322	.594

	Malaysia	Mainland China	-.306	.193	.393
		Hong Kong	-.967(*)	.277	.003
		Singapore	-.563	.273	.168
	Singapore	Mainland China	.258	.253	.740
		Hong Kong	-.403	.322	.594
		Malaysia	.563	.273	.168
Academic Self-concept	Mainland China	Hong Kong	-.28021	.24266	.656
		Malaysia	.39944	.18196	.129
		Singapore	.02677	.23843	.999
	Hong Kong	Mainland China	.28021	.24266	.656
		Malaysia	.67965	.26034	.048
		Singapore	.30698	.30252	.741
	Malaysia	Mainland China	-.39944	.18196	.129
		Hong Kong	-.67965	.26034	.048
		Singapore	-.37267	.25641	.468
	Singapore	Mainland China	-.02677	.23843	.999
		Hong Kong	-.30698	.30252	.741
		Malaysia	.37267	.25641	.468

* The mean difference is significant at the .05 level.

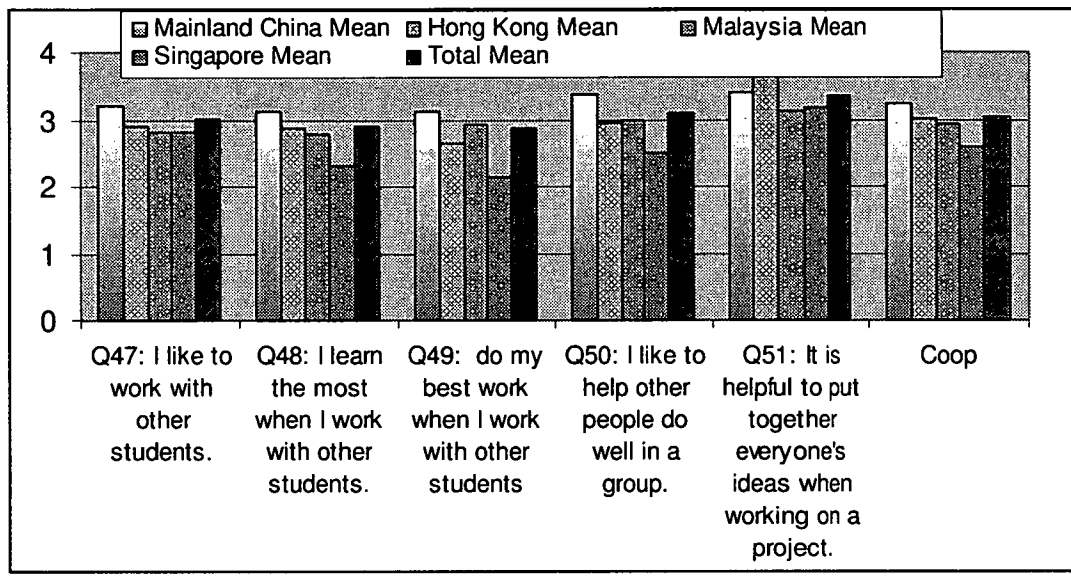
5.4.2.4 Learning Preferences

5.4.2.4.1 Preference for Co-operative Learning

There were five questions in the sub-level of Preference for Co-operative Learning. In the aspects of Preference for Co-operative Learning, four frequency categories were given of DISAGREE, DISAGREE SOMEWHAT, AGREE SOMEWHAT AND AGREE. In the case of questions requiring agreement or disagreement, 2.5 represents a point of "neutrality", since responses 1 and 2 are negative (disagreement) and 3 and 4 are positive (agreement). In this case students above 2.5 could be said to have positive learning characteristics or attitudes and those below to have negative characteristics or attitudes. Comparing the variables of the Chinese background students with the overall Preference for Co-operative Learning (Coop) used, the average mean is 3.04. The mean for mainland China is the highest at 3.24 and the lowest mean is Singapore with 2.59, with Hong Kong and Malaysia in between, but the means for all the Chinese background students are around 3.00 and rather consistent. This indicates that the Co-operative Learning attitudes adopted overall by the Chinese background students were positive. The mainland Chinese students used Cooperative Learning the most, followed by Hong Kong and Malaysia, while the Singaporean Chinese students used them the least. Comparing these variables of questions, the means are rather consistent and above 2.50 for all the five

questions. This shows that generally the three questions on Academic Self-concept had similar and positive feedback, as shown in Chart 11:

Chart 11: means for Preference for Co-operative Learning



From the analysis of ANOVA on Preference for Co-operative Learning, there is statistically significant difference among the groups of Chinese background students in all of these questions and Cooperative. However, ANOVA does not specify the groups, as shown in Table 25:

Table 25: ANOVA for Reference for Co-operative Learning

		Sum of Squares	df	Mean Square	F	Sig.
Q47: I like to work with other students.	Between Groups	5.908	3	1.969	2.823	.040
	Within Groups	122.069	175	.698		
	Total	127.978	178			
Q48: I learn the most when I work with other students.	Between Groups	12.951	3	4.317	5.522	.001
	Within Groups	136.815	175	.782		
	Total	149.765	178			
Q49: I do my best work when I work with other students	Between Groups	19.587	3	6.529	9.000	.000
	Within Groups	126.950	175	.725		
	Total	146.536	178			
Q50: I like to help other people do well in a group.	Between Groups	15.357	3	5.119	7.489	.000
	Within Groups	119.626	175	.684		
	Total	134.983	178			
Q51: It is helpful to put together everyone's ideas when working on a project.	Between Groups	5.411	3	1.804	2.806	.041
	Within Groups	112.477	175	.643		
	Total	117.888	178			

Co-operative	Between Groups	8.840	3	2.947	6.058	.001
	Within Groups	85.122	175	.486		
	Total	93.962	178			

* The mean difference is significant at the .05 level.

In order to know which groups have significant relationships within this statistical significance, one needs to use Post Hoc Tests to identify the group. Turkey HSD is chosen for this task.

The result shows that for Q47, no pair of groups has a significant relationship.
The result shows that for Q48, the following pairs of groups show a significant relationship:

- mainland China/Singapore (.001)
- Singapore/mainland China (.001)

The result shows that for Q49, the following pairs of groups show a significant relationship:

- mainland China/Singapore (.000)
- Singapore/mainland China (.000)
- Singapore/Malaysia (.002)
- Malaysia/Singapore (.002)

The result shows that for Q50, the following pairs of groups show a significant relationship:

- mainland China/Singapore (.000)
- Singapore/mainland China (.000)
- Mainland China/Malaysia (.040)
- Malaysia/Mainland China (.040)

The result shows that for Cooperative, the following pairs of groups show a significant relationship:

- mainland China/Singapore (.001)
- Singapore/mainland China (.001)

As shown in Table 26:

Table 26: Post Hoc Test Turkey HSD for Preference for Co-operative Learning

Dependent Variable	(I) Chinese background area	(J) Chinese background area	Mean Difference (I-J)	Std. Error	Sig.
Q47: I like to work with other students.	Mainland China	Hong Kong	.291	.200	.466
		Malaysia	.384	.150	.054
		Singapore	.374	.196	.230
	Hong Kong	Mainland China	-.291	.200	.466
		Malaysia	.093	.214	.973

		Singapore	.083	.249	.987
	Malaysia	Mainland China	-.384	.150	.054
		Hong Kong	-.093	.214	.973
		Singapore	-.010	.211	1.000
	Singapore	Mainland China	-.374	.196	.230
		Hong Kong	-.083	.249	.987
		Malaysia	.010	.211	1.000
Q48: I learn the most when I work with other students.	Mainland China	Hong Kong	.254	.212	.627
		Malaysia	.342	.159	.139
		Singapore	.813(*)	.208	.001
	Hong Kong	Mainland China	-.254	.212	.627
		Malaysia	.088	.227	.980
		Singapore	.559	.264	.150
	Malaysia	Mainland China	-.342	.159	.139
		Hong Kong	-.088	.227	.980
		Singapore	.471	.223	.155
	Singapore	Mainland China	-.813(*)	.208	.001
		Hong Kong	-.559	.264	.150
		Malaysia	-.471	.223	.155
Q49: I do my best work when I work with other students	Mainland China	Hong Kong	.493	.204	.077
		Malaysia	.211	.153	.513
		Singapore	.999(*)	.200	.000
	Hong Kong	Mainland China	-.493	.204	.077
		Malaysia	-.282	.219	.570
		Singapore	.506	.254	.195
	Malaysia	Mainland China	-.211	.153	.513
		Hong Kong	.282	.219	.570
		Singapore	.788(*)	.215	.002
	Singapore	Mainland China	-.999(*)	.200	.000
		Hong Kong	-.506	.254	.195
		Malaysia	-.788(*)	.215	.002
Q50: I like to help other people do well in a group.	Mainland China	Hong Kong	.422	.198	.147
		Malaysia	.397(*)	.148	.040
		Singapore	.855(*)	.194	.000
	Hong Kong	Mainland China	-.422	.198	.147
		Malaysia	-.025	.212	.999
		Singapore	.433	.247	.299
	Malaysia	Mainland China	-.397(*)	.148	.040
		Hong Kong	.025	.212	.999
		Singapore	.458	.209	.130
	Singapore	Mainland China	-.855(*)	.194	.000
		Hong Kong	-.433	.247	.299
		Malaysia	-.458	.209	.130
Q51: It is helpful to put together everyone's ideas when working on a project.	Mainland China	Hong Kong	-.282	.192	.458
		Malaysia	.257	.144	.282
		Singapore	.226	.188	.628
	Hong Kong	Mainland China	.282	.192	.458
		Malaysia	.539(*)	.206	.047
		Singapore	.508	.239	.149
	Malaysia	Mainland China	-.257	.144	.282
		Hong Kong	-.539(*)	.206	.047
		Singapore	-.031	.203	.999
	Singapore	Mainland China	-.226	.188	.628

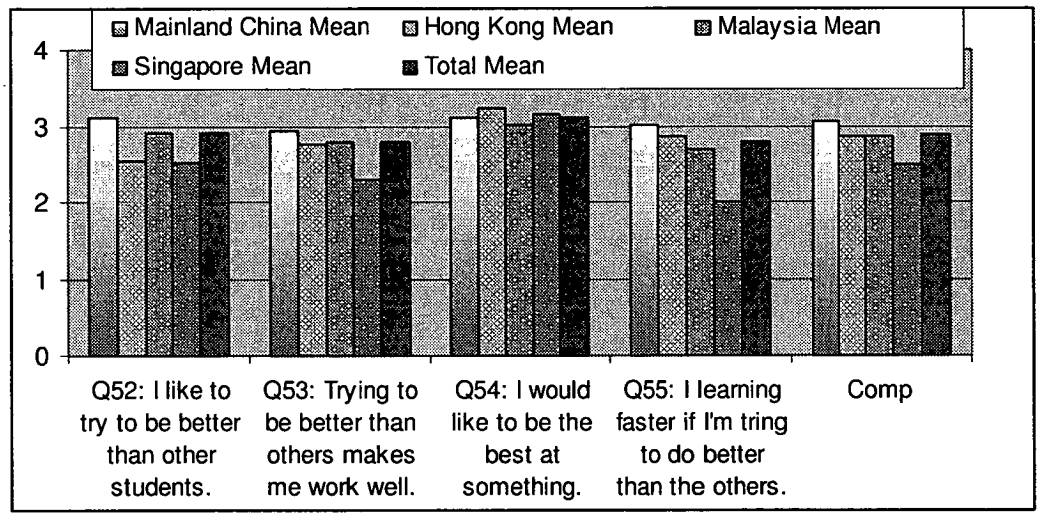
		Hong Kong	-.508	.239	.149
		Malaysia	.031	.203	.999
Co-operative	Mainland China	Hong Kong	.23561	.16683	.493
		Malaysia	.31818	.12510	.057
		Singapore	.65340(*)	.16392	.001
	Hong Kong	Mainland China	-.23561	.16683	.493
		Malaysia	.08256	.17899	.967
		Singapore	.41779	.20799	.189
	Malaysia	Mainland China	-.31818	.12510	.057
		Hong Kong	-.08256	.17899	.967
		Singapore	.33523	.17628	.231
	Singapore	Mainland China	-.65340(*)	.16392	.001
		Hong Kong	-.41779	.20799	.189
		Malaysia	-.33523	.17628	.231

* The mean difference is significant at the .05 level.

5.4.2.4.2 Preference for Competitive Learning

There were four questions in the sub-levels of Preference for Competitive. In the aspects of Preference for Competitive Learning, four frequency categories were given of DISAGREE, DISAGREE SOMEWHAT, AGREE SOMEWHAT AND AGREE. In the case of questions requiring agreement or disagreement, 2.5 represents a point of "neutrality", since responses 1 and 2 are negative (disagreement) and 3 and 4 are positive (agreement). In this case students with above 2.5 could be said to have positive learning characteristics or attitudes and those with below to have negative characteristics or attitudes. Comparing the variables of the Chinese background students with the overall Preference for Competitive Learning (Comp) used, the average mean is 2.90. The mean for mainland China is the highest at 3.05 and the lowest mean is Singapore with 2.50 with Hong Kong and Malaysia equal in between, but the means for all the Chinese background students are above 2.50 and rather consistent. This indicates that the Preference for Competitive Learning attitudes adopted overall by the Chinese background students were positive. The mainland Chinese students used Competitive Learning most, then Hong Kong and Malaysia equally in between, while the Singaporean Chinese students used it the least. Comparing these variables of questions, the means are rather consistent and above 2.50 for all four questions. This shows that generally the four questions on Preference for Competitive Learning had similar and positive feedback, as shown in Chart 12:

Chart 12: Means for Preference for Competitive Learning



From the analysis of ANOVA on Preference for Competitive Learning, there is statistically significant difference among the groups of Chinese background students, especially in Q52, Q53, Q55 and Competitive. Statistical significant difference indicates the nature of variation or diversification of the Chinese background students. The data analysis indicates that while there is some similarity among certain groups there are also variations among other groups depending on the nature of dependent variables. However, ANOVA does not specify the groups, as shown in Table 27:

Table 27: ANOVA for Preference for Competitive Learning

		Sum of Squares	df	Mean Square	F	Sig.
Q52: I like to try to be better than other students.	Between Groups	10.052	3	3.351	4.386	.005
	Within Groups	133.691	175	.764		
	Total	143.743	178			
Q53: Trying to be better than others makes me work well.	Between Groups	7.684	3	2.561	2.928	.035
	Within Groups	153.076	175	.875		
	Total	160.760	178			
Q54: I would like to be the best at something.	Between Groups	.789	3	.263	.365	.779
	Within Groups	126.195	175	.721		
	Total	126.983	178			
Q55: I learn faster if I'm trying to do better than the others.	Between Groups	19.551	3	6.517	7.868	.000
	Within Groups	144.952	175	.828		
	Total	164.503	178			
Competitive	Between Groups	5.755	3	1.918	3.147	.026
	Within Groups	106.672	175	.610		
	Total	112.427	178			

* The mean difference is significant at the .05 level.

In order to know which groups have significant relationships within this statistical significance, one needs to use Post Hoc Tests to identify the group. Turkey HSD is chosen for this task.

The result shows that for Q52, the following pairs of groups show a significant relationship:

- Mainland China/Hong Kong (.034)
- Hong Kong/mainland China (.034)
- mainland China/Singapore (.022)
- Singapore/mainland China (.022)

The result shows that for Q53, the following pairs of groups show a significant relationship:

- mainland China/Singapore (.019)
- Singapore/mainland China (.019)

The result shows that only for Q55, the following pairs of groups show a significant relationship:

- mainland China/Singapore (.000)
- Singapore/mainland China (.000)
- Hong Kong/Singapore (.009)
- Singapore/Hong Kong (.009)
- Malaysia/Singapore (.015)
- Singapore/Malaysia (.015)

The result shows that for Comp, the following pairs of groups show a significant relationship:

- mainland China/Singapore (.016)
- Singapore/mainland China (.016)

As shown in Table 28:

Table 28: Post Hoc Test Turkey HSD for Preference for Competitive Learning

Dependent Variable	(I) Chinese background area	(J) Chinese background area	Mean Difference (I-J)	Std. Error	Sig.
Q52: I like to try to be better than other students.	Mainland China	Hong Kong	.572(*)	.209	.034
		Malaysia	.199	.157	.583
		Singapore	.596(*)	.205	.022
	Hong Kong	Mainland China	-.572(*)	.209	.034
		Malaysia	-.373	.224	.347
		Singapore	.024	.261	1.000
	Malaysia	Mainland China	-.199	.157	.583
		Hong Kong	.373	.224	.347
		Singapore	.397	.221	.279

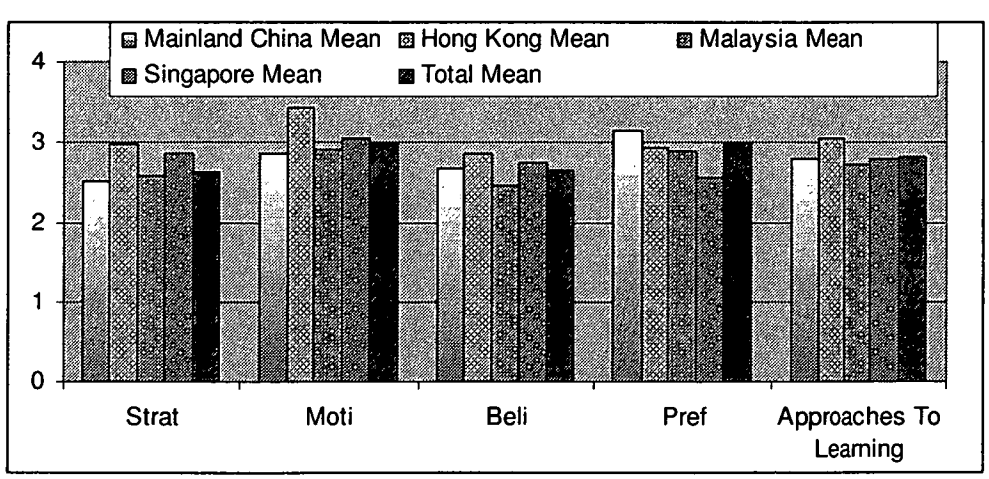
	Singapore	Mainland China	-.596(*)	.205	.022
		Hong Kong	-.024	.261	1.000
		Malaysia	-.397	.221	.279
Q53: Trying to be better than others makes me work well.	Mainland China	Hong Kong	.180	.224	.852
		Malaysia	.177	.168	.716
		Singapore	.649(*)	.220	.019
	Hong Kong	Mainland China	-.180	.224	.852
		Malaysia	-.003	.240	1.000
		Singapore	.468	.279	.338
	Malaysia	Mainland China	-.177	.168	.716
		Hong Kong	.003	.240	1.000
		Singapore	.471	.236	.195
	Singapore	Mainland China	-.649(*)	.220	.019
		Hong Kong	-.468	.279	.338
		Malaysia	-.471	.236	.195
Q54: I would like to be the best at something.	Mainland China	Hong Kong	-.121	.203	.933
		Malaysia	.085	.152	.943
		Singapore	-.068	.200	.986
	Hong Kong	Mainland China	.121	.203	.933
		Malaysia	.207	.218	.778
		Singapore	.053	.253	.997
	Malaysia	Mainland China	-.085	.152	.943
		Hong Kong	-.207	.218	.778
		Singapore	-.154	.215	.891
	Singapore	Mainland China	.068	.200	.986
		Hong Kong	-.053	.253	.997
		Malaysia	.154	.215	.891
Q55: I learn faster if I'm trying to do better than the others.	Mainland China	Hong Kong	.160	.218	.883
		Malaysia	.330	.163	.185
		Singapore	1.024(*)	.214	.000
	Hong Kong	Mainland China	-.160	.218	.883
		Malaysia	.170	.234	.886
		Singapore	.864(*)	.271	.009
	Malaysia	Mainland China	-.330	.163	.185
		Hong Kong	-.170	.234	.886
		Singapore	.694(*)	.230	.015
	Singapore	Mainland China	-1.024(*)	.214	.000
		Hong Kong	-.864(*)	.271	.009
		Malaysia	-.694(*)	.230	.015
Competitive	Mainland China	Hong Kong	.19773	.18676	.715
		Malaysia	.19796	.14004	.493
		Singapore	.55000(*)	.18350	.016
	Hong Kong	Mainland China	-.19773	.18676	.715
		Malaysia	.00023	.20037	1.000
		Singapore	.35227	.23283	.432
	Malaysia	Mainland China	-.19796	.14004	.493
		Hong Kong	-.00023	.20037	1.000
		Singapore	.35204	.19734	.285
	Singapore	Mainland China	-.55000(*)	.18350	.016
		Hong Kong	-.35227	.23283	.432
		Malaysia	-.35204	.19734	.285

* The mean difference is significant at the .05 level.

5.4.2.5 Approaches to learning

Having analysed the four components of approaches to learning, let us now look at the overall situation of approaches to learning used by the four groups of Chinese background students. Comparing the variables of the Chinese background students with the overall Approaches to Learning used by these students, the average mean is 2.80. The means for all the Chinese background students are above 2.50 and rather consistent and the mean for Hong Kong is the highest at 3.05 and the lowest mean is Malaysia with 2.71. The means these students are at average level except for Hong Kong which is at average high level, indicating that all the Chinese background students held positive approaches to learning but Hong Kong students tended to have a higher use of approaches to learning than others. In detailed comparisons, it can be seen that the mean for Hong Kong is the highest (2.99) but mainland China is the lowest (2.52) in terms of learning strategies, indicating that Hong Kong students made the most of learning strategies while mainland Chinese students made the least. The mean for Hong Kong is the highest (3.43) but mainland China is the lowest (2.87) in terms of overall motivation, indicating that Hong Kong students had the most motivation while mainland Chinese students had the least. In terms of Self-related Beliefs the mean for Hong Kong is the highest (2.87) but Malaysia is the lowest (2.47), indicating that Hong Kong students had the most Self-related Beliefs while Malaysian Chinese students had the least. In terms of learning preferences the means for these students are consistent, indicating that all the Chinese background students held positive learning preferences. Although varying slightly, there is no obvious difference in learning preferences among these groups, as shown in Chart 13:

Chart 13: Means for Approaches to Learning



From the analysis of ANOVA on Approaches to Learning, there is statistically significant difference among the groups of Chinese background students, especially in Strategy, Motivation, Self-related Belief, and Approaches to Learning. Statistical significant difference indicates that nature of variation or diversification of the Chinese background students. The data analysis indicates while that is some similarity among certain groups there are also variations among other groups depending on the nature of dependent variables. However, ANOVA does not specify the groups, as shown in Table 29:

Table 29: ANOVA for Preference for Approaches to Learning

		Sum of Squares	df	Mean Square	F	Sig.
Strategy	Between Groups	5.315	3	1.772	12.580	.000
	Within Groups	24.646	175	.141		
	Total	29.962	178			
Motivation	Between Groups	5.916	3	1.972	4.061	.008
	Within Groups	84.974	175	.486		
	Total	90.890	178			
Self-related Belief	Between Groups	2.923	3	.974	1.572	.198
	Within Groups	108.445	175	.620		
	Total	111.367	178			
Learning Preference	Between Groups	7.167	3	2.389	5.878	.001
	Within Groups	71.127	175	.406		
	Total	78.294	178			
Approach To Learning	Between Groups	1.786	3	.595	3.045	.030
	Within Groups	34.216	175	.196		
	Total	36.002	178			

In order to know which groups have significant relationships within this statistical significance, one needs to use Post Hoc Tests to identify the group. Turkey HSD is chosen for this task.

The result shows that for Strategy, the following pairs of groups show a significant relationship:

- Mainland China/Hong Kong (.000)
- Hong Kong/mainland China (.000)
- mainland China/Singapore (.001)
- Singapore/mainland China (.001)
- Hong Kong/Malaysia (.000)
- Malaysia/Hong Kong (.000)
- Malaysia/Singapore (.017)
- Singapore/Malaysia (.017)

The result shows that for Motivation, the following pairs of groups show a significant relationship:

- mainland China/Hong Kong (.005)
- Hong Kong/mainland China (.005)
- Hong Kong/Malaysia (.021)
- Malaysia/Hong Kong (.021)

The result shows no significant relationship for Self-related Belief:

The result shows that for Learning Preference, the following pairs of groups show a significant relationship:

- mainland China/Singapore (.001)
- Singapore/mainland China (.001)

The result shows that for Approaches to Learning, the following pairs of groups show a significant relationship:

- Hong Kong/Malaysia (.016)
- Malaysia/Hong Kong (.016)

As shown in Table 30:

Table 30: Post Hoc Test Turkey HSD for Approaches to Learning

Dependent Variable	(I) Chinese background area	(J) Chinese background area	Mean Difference (I-J)	Std. Error	Sig.
Strategy	Mainland China	Hong Kong	-.47275(*)	.08977	.000
		Malaysia	-.06575	.06731	.763
		Singapore	-.34934(*)	.08821	.001
	Hong Kong	Mainland China	.47275(*)	.08977	.000
		Malaysia	.40700(*)	.09631	.000
		Singapore	.12342	.11192	.688
	Malaysia	Mainland China	.06575	.06731	.763
		Hong Kong	-.40700(*)	.09631	.000
		Singapore	-.28358(*)	.09486	.017
	Singapore	Mainland China	.34934(*)	.08821	.001
		Hong Kong	-.12342	.11192	.688
		Malaysia	.28358(*)	.09486	.017
Motivation	Mainland China	Hong Kong	-.56482(*)	.16668	.005
		Malaysia	-.04287	.12499	.986
		Singapore	-.18252	.16378	.681
	Hong Kong	Mainland China	.56482(*)	.16668	.005
		Malaysia	.52195(*)	.17883	.021
		Singapore	.38230	.20780	.258
	Malaysia	Mainland China	.04287	.12499	.986
		Hong Kong	-.52195(*)	.17883	.021
		Singapore	-.13965	.17613	.858
	Singapore	Mainland China	.18252	.16378	.681

		Hong Kong	-.38230	.20780	.258
		Malaysia	.13965	.17613	.858
Self-related Belief	Mainland China	Hong Kong	-.1915	.1883	.740
		Malaysia	.2055	.1412	.467
		Singapore	-.0778	.1850	.975
	Hong Kong	Mainland China	.1915	.1883	.740
		Malaysia	.3970	.2020	.205
		Singapore	.1137	.2348	.962
	Malaysia	Mainland China	-.2055	.1412	.467
		Hong Kong	-.3970	.2020	.205
		Singapore	-.2833	.1990	.486
	Singapore	Mainland China	.0778	.1850	.975
		Hong Kong	-.1137	.2348	.962
		Malaysia	.2833	.1990	.486
Learning Preference	Mainland China	Hong Kong	.21667	.15250	.488
		Malaysia	.25807	.11435	.112
		Singapore	.60170(*)	.14984	.001
	Hong Kong	Mainland China	-.21667	.15250	.488
		Malaysia	.04140	.16361	.994
		Singapore	.38503	.19012	.183
	Malaysia	Mainland China	-.25807	.11435	.112
		Hong Kong	-.04140	.16361	.994
		Singapore	.34363	.16114	.147
	Singapore	Mainland China	-.60170(*)	.14984	.001
		Hong Kong	-.38503	.19012	.183
		Malaysia	-.34363	.16114	.147
Approach To Learning	Mainland China	Hong Kong	-.25310	.10577	.082
		Malaysia	.08873	.07931	.678
		Singapore	-.00199	.10393	1.000
	Hong Kong	Mainland China	.25310	.10577	.082
		Malaysia	.34184(*)	.11348	.016
		Singapore	.25112	.13186	.230
	Malaysia	Mainland China	-.08873	.07931	.678
		Hong Kong	-.34184(*)	.11348	.016
		Singapore	-.09072	.11176	.849
	Singapore	Mainland China	.00199	.10393	1.000
		Hong Kong	-.25112	.13186	.230
		Malaysia	.09072	.11176	.849

* The mean difference is significant at the .05 level.

5.4.3 Comparing means of DV with other IV

Comparing Means of DV of approaches to learning with IV of Chinese background students provides us with a broad picture of how the aspects of difference in approaches to learning of Chinese background students manifested themselves by national background. It is also necessary to look in depth at this picture. IV such as gender, academic faculty, length of stay, degree and English ability are also applied to DV of Approaches to Learning in conjunction with IV of Chinese background

students in order to probe into further insights of approaches to learning used by Chinese background students, As English ability consists of the elements of speaking, listening, reading and writing in Q6, Q7, Q8 and Q9, they were grouped into one factor: English ability. DV is placed at the top level of the means of Approaches to Learning, i.e. Learning Strategies, Motivation and Self-related Beliefs (Learning Preference is not considered due to its irrelevance to learning outcomes (OECD, 2003)) in order to make clear comparisons between these groups of students.

5.4.3.1 Gender

Comparing the variables of the Chinese background students with the overall Approaches to Learning used between males and females, the average mean for males is 2.81 and that for females is 2.80. For males, the mean for Hong Kong is the highest at 3.10 and the lowest mean is Malaysia with 2.72; for females, the mean for Hong Kong is the highest at 3.01 and the lowest mean is Malaysia with 2.71. This indicates that the Approaches to Learning adopted overall by the Chinese background students, both male and female, were positive, that is to say, the four groups of Chinese background students had positive learning attitudes and characteristics no matter which sex. For males, Hong Kong students used approaches to learning slightly more than other groups, while Malaysian Chinese students used them the least. For females, Hong Kong students also used approaches to learning slightly more than other groups while Malaysian Chinese students used them the least. For detailed comparisons, in terms of learning strategies it can be seen that the means for males and females are similar, with male Hong Kong students having the highest mean of 3.11, indicating that male Hong Kong students made the most of learning strategies. In terms of overall motivation the means for males and females are similar, with male Hong Kong students having the highest mean of 3.41 and females 3.45, indicating that Hong Kong students had the most motivation, followed by male and female Singaporean Chinese students (3.07 and 3.03). In terms of Self-related Beliefs the mean for males is little higher than for females, with male Hong Kong students having the highest mean of 3.11 and female Malaysian Chinese students the lowest of 2.42 which is below 2.5, indicating that male Hong Kong students had the most self-related beliefs, while female Malaysian Chinese students had the least, showing slightly negative learning attitudes, as shown in Table 31.

Table 31: Approaches to Learning/Gender

Gender	Chinese background area		Strategy	Motivation	Self-Belief	Preference	Approach To Learning
Male	Mainland China	Mean	2.4946	2.8206	2.797	3.1372	2.8124
	Hong Kong	Mean	3.1100	3.4056	2.967	2.9475	3.1074
	Malaysia	Mean	2.6037	2.9177	2.509	2.8315	2.7155
	Singapore	Mean	2.8409	3.0682	2.670	2.5545	2.7835
	Total	Mean	2.6465	2.9523	2.709	2.9424	2.8126
Female	Mainland China	Mean	2.5323	2.9028	2.579	3.1552	2.7923
	Hong Kong	Mean	2.8875	3.4537	2.781	2.9167	3.0098
	Malaysia	Mean	2.5545	2.9003	2.419	2.9602	2.7084
	Singapore	Mean	2.8875	3.0324	2.826	2.5375	2.8209
	Total	Mean	2.6282	2.9891	2.599	3.0003	2.8041
Total	Mainland China	Mean	2.5159	2.8670	2.674	3.1474	2.8011
	Hong Kong	Mean	2.9886	3.4318	2.866	2.9307	3.0542
	Malaysia	Mean	2.5816	2.9099	2.469	2.8893	2.7123
	Singapore	Mean	2.8652	3.0495	2.752	2.5457	2.8030
	Total	Mean	2.6369	2.9716	2.651	2.9728	2.8081

5.4.3.2 Academic faculty

Comparing the variables of the Chinese background students with the overall Approaches to Learning used among the different faculty groups of Education and Arts (EA), Science, Technology, Health (STH), and Business and Law (BL), the highest mean is for EA with 2.92 and the lowest mean is for BL with 2.72. The means for all groups are rather consistent, with the mean for Hong Kong in STH the highest at 3.13. This indicates that the Chinese background students in EA used approaches to learning slightly more than those in other faculty groups, but Hong Kong students in STH used the most. For detailed comparisons, in terms of learning strategies it can be seen that the means for EA (2.82) and STH (2.81) are a little higher than the one for BL (2.50), and Hong Kong students in STH had the highest mean of 3.25, indicating that the Chinese background students in EA and STH used more learning strategies than those in BL, and Hong Kong students in STH made the most of learning strategies. In terms of motivation the means for EA (3.29) and STH (3.01) are a little higher than the one for BL (2.86), and Hong Kong students in STH had the highest mean of 3.52, indicating that the Chinese background students in EA and STH had more motivation than those in BL, and Hong Kong students in STH had the most. In terms of Self-related Beliefs the means for EA, STH and BL are

similar, and mainland Chinese students in STH had the highest mean of 2.91, indicating that there was no difference in Self-related Beliefs for the Chinese background students among these faculty groups. However mainland Chinese students in STH had slightly more than those in other groups, as shown in Table 32:

Table 32: Approaches/Faculty

Academic Faculty	Chinese background area		Strategies	Motivation	Self-Beliefs	Preference	Approach To Learning
Education and Arts	Mainland China	Mean	2.6400	2.8222	2.583	3.1250	2.7926
	Hong Kong	Mean	2.8393	3.3810	2.869	2.9446	3.0085
	Malaysia	Mean	2.5750	2.9306	2.021	2.3500	2.4691
	Singapore	Mean	2.9786	3.5357	2.679	2.6286	2.9554
	Total	Mean	2.8196	3.2877	2.710	2.8554	2.9181
Science, Technology, Health	Mainland China	Mean	2.6346	2.9487	2.913	3.5058	3.0006
	Hong Kong	Mean	3.2500	3.5208	2.859	2.9063	3.1341
	Malaysia	Mean	2.7295	2.9533	2.616	2.9716	2.8175
	Singapore	Mean	2.8500	2.8222	2.850	2.4750	2.7493
	Total	Mean	2.8075	3.0131	2.770	2.9991	2.8973
Business, Law	Mainland China	Mean	2.4836	2.8545	2.634	3.0795	2.7630
	Malaysia	Mean	2.4520	2.8700	2.375	2.8600	2.6393
	Singapore	Mean	2.7583	2.8611	2.674	2.5667	2.7149
	Total	Mean	2.4923	2.8588	2.571	2.9921	2.7285
Total	Mainland China	Mean	2.5159	2.8670	2.674	3.1474	2.8011
	Hong Kong	Mean	2.9886	3.4318	2.866	2.9307	3.0542
	Malaysia	Mean	2.5816	2.9099	2.469	2.8893	2.7123
	Singapore	Mean	2.8652	3.0495	2.752	2.5457	2.8030
	Total	Mean	2.6369	2.9716	2.651	2.9728	2.8081

Table 32 above (continued)

5.4.3.3 Length of stay in Australia (up to now)

Comparing the variables of the Chinese background students with the overall Approaches to Learning used among the different lengths of stay in Australia of: Within a year (1 Year); Over one year to two years (2 Years); and Over two years (3+ Years), the overall means for all lengths of stay (2.78, 2.85, and 2.86) present themselves in a rising trend, in which the means for Malaysia increase from 2.66 to 2.69 and end up as 2.93. This indicates that through years of learning in Australian tertiary education, the overall Chinese background students, especially Malaysian Chinese students, had increased their abilities in using approaches to learning, although only slightly. For detailed comparisons, in terms of learning strategies it can

be seen that the means for mainland Chinese students increased from 2.46 to 2.59 through lengths of stay in Australia, indicating that the mainland Chinese students have enhanced their use of learning strategies. In terms of motivation the means for mainland China increased from 2.84 to 2.88, ending up to 2.94 through increasing lengths of stay in Australia, indicating that the mainland Chinese students had increased their motivation through years of stay in Australia. In terms of Self-related Beliefs the means for Malaysia increased from 2.45 to 2.50, ending up at 2.51 through increasing lengths of stay in Australia, indicating that the Malaysian Chinese students had increased their Self-related Beliefs through years of stay in Australia; as shown in Table 33:

Table 33: Means for Approaches to Learning/Length of Stay in Australia

Length of Stay in Australia	Chinese background area		Strategies	Motivation	Self-Beliefs	Preference	Approach To Learning
Within a year	Mainland China	Mean	2.4612	2.8356	2.556	3.0842	2.7343
	Hong Kong	Mean	3.0667	3.4707	2.905	2.9236	3.0915
	Malaysia	Mean	2.5000	2.7778	2.446	2.9290	2.6633
	Singapore	Mean	2.8711	3.1023	2.746	2.5539	2.8182
	Total	Mean	2.6312	2.9613	2.611	2.9323	2.7841
Over one year to two years	Mainland China	Mean	2.5875	2.8833	3.031	3.2300	2.9330
	Hong Kong	Mean	2.7000	3.2870	2.875	3.1333	2.9988
	Malaysia	Mean	2.7250	2.7472	2.504	2.7775	2.6885
	Singapore	Mean	2.8000	2.8704	2.667	2.5083	2.7113
	Total	Mean	2.6528	2.8781	2.841	3.0361	2.8521
Over two years	Mainland China	Mean	2.5938	2.9427	2.589	3.2375	2.8406
	Hong Kong	Mean	2.4500	3.1667	2.125	2.4500	2.5479
	Malaysia	Mean	2.7188	3.6250	2.510	2.8750	2.9323
	Singapore	Mean	2.9500	2.5833	3.125	2.5000	2.7896
	Total	Mean	2.6404	3.1474	2.567	3.0673	2.8556
Total	Mainland China	Mean	2.5159	2.8670	2.674	3.1474	2.8011
	Hong Kong	Mean	2.9886	3.4318	2.866	2.9307	3.0542
	Malaysia	Mean	2.5816	2.9099	2.469	2.8893	2.7123
	Singapore	Mean	2.8652	3.0495	2.752	2.5457	2.8030
	Total	Mean	2.6369	2.9716	2.651	2.9728	2.8081

5.4.3.4 Undergraduate or postgraduate

As no Hong Kong and Singaporean Chinese students participating in the survey were from postgraduate programs, the overall means for the variables between

Undergraduate and Postgraduate cannot be compared. Comparing the variables of mainland China and Malaysia between undergraduate and postgraduate programs, it was learned that the mean for mainland China/Postgraduate (2.82) is higher than mainland China /Undergraduate (2.78), indicating that mainland Chinese postgraduate students used more approaches to learning than mainland Chinese undergraduate students. The mean for Postgraduate Malaysian students (2.78) is also higher than Undergraduate (2.69), indicating that Malaysian Chinese students in postgraduate programs used more approaches to learning than ones in undergraduate programs. It can also be seen that in both undergraduate and postgraduate programs, the means for mainland China are higher than those for Malaysia, indicating that mainland Chinese students used more approaches to learning than Malaysian Chinese students. For detailed comparisons, in terms of learning strategies it can be seen that the means for mainland China in Undergraduate programs is 2.56 but that of Postgraduate is 2.48, showing slightly negative learning characteristics, indicating that the mainland Undergraduate Chinese students used more learning strategies than their Postgraduate compatriots; the Malaysian Chinese students also showed this result. In terms of motivation the means for mainland China students in Postgraduate programs are higher (2.88) than those in Undergraduate (2.85); Malaysia shows the same tendency with 3.30 (Postgraduate) to 2.77 (Undergraduate), indicating that the mainland Chinese students and Malaysian Chinese students in Postgraduate programs had more motivation than those in Undergraduate programs. In terms of Self-related Beliefs, the means of mainland China for Postgraduate are higher (2.78) than those (2.53) for Undergraduate, indicating that the mainland Chinese students in Postgraduate programs had more confidence to engage themselves in their study work, shown in Table 34:

Table 34: Means for Approaches to Learning/Degree

Degree	Chinese background area		Strategies	Motivation	Self-Beliefs	Preference	Approach To Learning
Undergraduate	Mainland China	Mean	2.5625	2.8534	2.528	3.1604	2.7760
	Hong Kong	Mean	2.9886	3.4318	2.866	2.9307	3.0542
	Malaysia	Mean	2.5931	2.7701	2.508	2.8799	2.6878
	Singapore	Mean	2.8652	3.0495	2.752	2.5457	2.8030
	Total	Mean	2.7115	2.9751	2.629	2.9100	2.8065
Postgraduate	Mainland China	Mean	2.4816	2.8770	2.781	3.1378	2.8195
	Malaysia	Mean	2.5500	3.2970	2.359	2.9154	2.7803

	Total	Mean	2.4960	2.9651	2.693	3.0911	2.8113
Total	Mainland China	Mean	2.5159	2.8670	2.674	3.1474	2.8011
	Hong Kong	Mean	2.9886	3.4318	2.866	2.9307	3.0542
	Malaysia	Mean	2.5816	2.9099	2.469	2.8893	2.7123
	Singapore	Mean	2.8652	3.0495	2.752	2.5457	2.8030
	Total	Mean	2.6369	2.9716	2.651	2.9728	2.8081

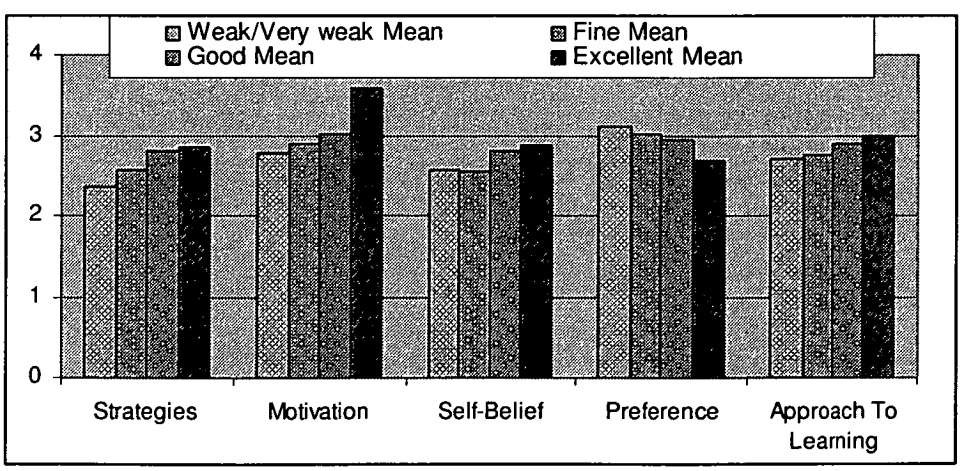
5.4.3.5 English ability

Comparing the variables between approaches to learning and English Ability, it could easily be seen that the means take on a declining order in line with a declining proficiency in English ability (2.99, 2.88, 2.76, and 2.60), indicating that with better proficiency in English, more approaches to learning were used by these students. With regards to the four components of approaches to learning, the means for learning strategies, motivation, and self-related beliefs all show a declining tendency as English ability declines, in particular the mean of Excellent for Motivation shows extraordinarily higher than the rest, indicating that the higher English ability the students have, the more learning strategies, motivation and self-related beliefs they can draw on. In particular Excellent English considerably enhances the motivation of these students as shown in Table 35 and Chart 14.

Table 35: Means for Approaches to Learning/English Ability

English Ability		Strategies	Motivation	Self-Belief	Preference	Approach To Learning
Excellent	Mean	2.8577	3.5705	2.881	2.6865	2.9990
Good	Mean	2.7920	3.0139	2.791	2.9348	2.8829
Fine	Mean	2.5753	2.9036	2.551	3.0067	2.7590
Weak/Very weak	Mean	2.3476	2.7765	2.563	3.1071	2.6987

Chart 14: Means for Approaches to Learning/English Ability



In Table 31, it can be seen that learning preference shows an inverse relation to English ability. In Table 32, both cooperative and competitive learning show the opposite trend against the degree of English proficiency. Therefore, the relation between English ability and learning preferences remains to be further researched.

Table 36: Learning Preferences/ English Ability

English		Cooperative Learning	Competitive Learning
Excellent	Mean	2.7385	2.6346
Good	Mean	2.9857	2.8839
Fine	Mean	3.0809	2.9326
Weak/Very weak	Mean	3.2381	2.9762

5.5 General reflection

Prior to engaging in reflective discussion, it is necessary here to restate the general situation of people involved with these data. There were 179 participants, of which the dominant group came from China (47%) and the groups with the lowest number were Hong Kong (12.3%) and Singapore (12.3%). Among all the participants, there were similar numbers for male and female participants. Most of participants came from the faculties of Business and Law (54.7%) and had stayed in Australia for less than a year (65.4%). The participating undergraduate students were double the number of postgraduate students. The majority of the participants had intermediate English ability.

As mentioned above, the research objective in the quantitative data analysis is to identify and examine Chinese background students' learning approaches in Australian tertiary education discourse, by separately investigating learning strategies, motivation, self-related belief, and learning preferences. Then the data processing outcomes will be discussed at two levels, firstly to look at the components of approaches to learning and then to review how non-component factors of approaches to learning affect them in terms of gender, academic faculty, length of stay in Australia, undergraduate or postgraduate, and English ability.

5.5.1 Approaches to learning

In the first component of approaches to learning: learning strategies, there are five parts: memorisation strategies, elaboration strategies, organisation strategies, control strategies and affective strategies.

With regards to memorisation strategies, all the Chinese background students were at average level, which agrees with the argument of Chalmers & Volet (Chalmers & Volet, 1997) that there were still some misconceptions about Chinese students among education practitioners in Western societies. These misconceptions included regarding them as rote learners. The means also indicated that Hong Kong students tended to use memorisation strategies a little more than others, and mainland Chinese students a little less. This outcome reaffirms the argument of some researchers (Biggs & Watkins, 1996; Ling et al., 2005; Marton, Dall'Alba, & Tse, 1993; Marton, Dall'Alba, & Tse, 1996) that Hong Kong students are slightly fond of memorisation. Yet, these researchers also found that Hong Kong students tend to understand knowledge through memorising it. The analysis outcome disproves a conventional impression that mainland Chinese students used memorisation strategies most when compared to other Chinese national groups. The fact that the means for all four groups of Chinese background students are consistent indicates that, although varying slightly, there is no manifest difference in the use of memorisation strategies among these groups. Statistically, there is significant difference between mainland China/Hong Kong, Hong Kong/Singapore and Malaysia/Hong Kong groups. Statistical significance provides a degree of certainty that the results from the sample can be generalised to the wider population from which the sample has itself been drawn.

Regarding elaboration strategies, the data analysis shows that the Chinese background students were at average level except Singapore which was at average high level. This indicates that there is a difference between Singaporean Chinese students and the other three groups in using elaboration strategies. However, there is no significant difference among these groups.

With respect to organisation strategies, all these groups of students were at average level. And the means for these groups are consistent, indicating that, although slightly different, there is no manifest difference in the use of organisation strategies among them. However, there is no significant difference among these groups. With respect to affective strategies, the Chinese background students were at average high level indicating that they tended to use organisation strategies. But the means for these groups are rather consistent, indicating that, although varying slightly, there is

no manifest difference in using organisation strategies among them. However, there is no significant difference among these groups.

In respect of affective strategies, Chinese background students were at average high level indicating that they tended to use affective strategies. But the means for these groups are rather consistent, indicating that, although slightly different, there is no manifest difference in using affective strategies among them. Statistically, there is significant difference between mainland China/Hong Kong, mainland China/Singapore, Malaysia/Singapore and Malaysia/Hong Kong groups.

In regard to control strategies, Chinese background students were at average high level indicating that they tended to use control strategies. But the means for these groups are rather consistent, indicating that, although varying slightly, there is no manifest difference in the use of control strategies among them. Statistically, there is significant difference between mainland China/Hong Kong, Malaysia/Singapore and Malaysia/Hong Kong groups. Therefore, in this component, elaboration strategy differs between Singaporean Chinese students and the other Chinese background students.

Motivation is the second component of approaches to learning, and has three parts: instrumental motivation, interest in reading and effort and persistent in learning. With regards to instrumental motivation, Chinese background students were at average high level indicating that they tended to have instrumental motivation. But the means for these groups are rather consistent, indicating that, although varying slightly, there is no manifest difference in instrumental motivation among them. Statistically, there is significant difference between mainland China/Hong Kong, Malaysia/Hong Kong and Hong Kong/Singapore groups. With respect to interest in reading, Chinese background students were at average high level indicating that they tended to have interest in reading. But the means for these groups are rather consistent, indicating that, although varying slightly, there is no manifest difference in interest in reading among them. However, there is no significant difference among these groups. Regarding effort and persistence in learning, the data analysis shows that the Chinese background students were at average level except for Hong Kong which was at average high level. This indicates that there is a difference in effort and persistence between Hong Kong students and the other three groups. Statistically,

there is significant difference between the Hong Kong/Malaysia groups. Effort and persistence refers to volition – a will to learn shown immediately before and during the learning process (OECD, 2003). Therefore, in this component effort and persistence differs between Hong Kong students and the other three groups.

The third component of approaches to learning: self-related belief consists of self-efficacy, an academic self-concept. With regards to self-efficacy, Chinese background students were at average level, indicating that they tended to have self-efficacy. But the means for these groups are rather consistent, indicating that, although varying slightly, there is no manifest difference in self-efficacy among them. However, there is no significant difference among these groups. With respect to academic self-concept, the means indicate that the Chinese background students held positive self-efficacy except Malaysians who had a negative self-concept, i.e., little confidence in fulfilling their school tasks. Statistically, there is significant difference between the Hong Kong/Malaysia groups. Academic self-concept refers to overall competence in school subjects (OECD, 2003). Therefore, in this component, academic self-concept differs between Malaysian Chinese students and the other groups. Belief in one's own abilities is highly relevant to successful learning (Marsh, 1986), as well as being a goal in its own right, and affects well-being and personality development which are especially important to students from less advantaged backgrounds.

The last component of approaches to learning is learning preference, consisting of cooperative learning preference and competitive learning preference. With regards to cooperative learning preference, the means for these students are consistent, indicating that all the Chinese background students held a positive cooperative learning attitude. Although varying slightly, there is no manifest difference in cooperative learning preference among these students. Statistically, there is significant difference between the mainland China/Singapore groups. With regards to competitive learning preference, the means for these students are consistent, indicating that all the Chinese background students held a positive competitive learning attitude. Although varying slightly, there is no manifest difference in competitive learning preference among these students. Statistically, there is significant difference between the mainland China/Singapore groups. Therefore, there is no difference in learning preference among these groups.

Having discussing the four components of approaches to learning of the Chinese background students in details and separately, let us now look at the four components and the approaches to learning as a whole. With regards to learning strategies, the means for the four groups of Chinese background students are at average level and very consistent, indicating that these groups of students had positive learning attitudes and characteristics and, although they vary slightly, there is no manifest difference in learning strategies among them. Statistically, there is significant difference between the mainland China/Hong Kong, mainland China/Singapore, Hong Kong/Malaysia and Malaysia/Singapore groups. With regards to motivation, the means for the Chinese background students are at average level except for Hong Kong and Singapore which are at average high level, indicating that these groups of students had positive learning attitudes and there is a manifest difference in motivation for Singaporean Chinese students, and especially for Hong Kong students who had more motivation than mainland Chinese students and Malaysian Chinese students. Statistically, there is significant difference between the mainland China/Hong Kong and Hong Kong/Malaysia groups. With respect to self-related belief, the means for the four groups of Chinese background students are at average level and very consistent, indicating that these groups of students had positive learning attitudes and characteristics and, although slightly different, there is no manifest difference in self-related belief among them. Statistically, there is no significant difference among these groups. With respect to learning preference, the means for these students are consistent, indicating that all the Chinese background students held positive learning preferences. Although slightly different, there is no manifest difference in learning preferences among these students. Statistically, there is significant difference between the mainland China/Singapore groups. Regarding the overall approaches to learning, the means for these students are at average level except for Hong Kong which is at average high level, indicating that there is difference between Hong Kong and the other groups. All the Chinese background students held positive approaches to learning but Hong Kong students tended to use more approaches to learning than others. Statistically, there is significant difference between the Hong Kong/Malaysia groups.

5.5.2 Other factors

The non-component factors of approaches to learning cover gender, academic faculty, length of stay in Australia, undergraduate or postgraduate, and English

ability. With respect to gender, the means indicate that both males and females had positive learning attitudes but there is no manifest difference between genders. With regards to academic faculty, the means indicate that the Chinese background students in Education and Arts used approaches to learning slightly more than those in other faculty groups, but Hong Kong students in Science, Technology and Engineering, and Health used the most. Regarding length of stay in Australia, the means indicate that, through years of learning in Australia, the overall Chinese background students, especially Malaysian Chinese students, had increased their abilities in using approaches to learning. Of those, mainland Chinese students increased their abilities both in learning strategies and motivation, while Malaysian Chinese students increased their motivation more through their stay in Australia. In terms of degree, the means for mainland China and Malaysia indicated that the postgraduate students used more approaches to learning than the undergraduate students, but this was reversed for learning strategies. It is likely that students at the undergraduate level tend to use more learning strategies to make up for their lack of motivation, and self-related belief due to their younger age. With regard to English ability, the means indicate that the degree of English proficiency is in direct ratio with the employment of approaches to learning. Especially, excellent English helps increase the motivation of students considerably.

5.6 Conclusion

By investigating the approaches to learning used by the four groups of Chinese background students, from mainland China, Hong Kong, Malaysia and Singapore, several findings have surfaced. In terms of learning strategies, there is no manifest difference in memorisation strategies, organisation strategies, affective strategies and control strategies among these groups, except for affective strategies and control strategies. Their validity was also tested between some groups indicated by their statistical significance. However, it has been found that there is a difference in the employment of elaboration strategies between Singaporean Chinese students and the other three national groups. However, there is no validity between them tested by statistical significance. In terms of motivation, there is no manifest difference in instrumental motivation and interest in reading, the former with validity but the latter without validity as tested by statistical significance. However, there is a difference in effort and persistence between Hong Kong students and the other national groups with validity among some groups tested by statistical significance. In terms of self-

related belief, although there is no manifest difference in self-efficacy among the groups, there is a difference found between Malaysian Chinese students and the other national students in that Malaysian students held a negative self-concept. In terms of learning preference, there is no manifest difference found among these groups with validity tested by statistical significance.

For the overall learning strategies, these students held positive learning attitudes and characteristics and there appears no manifest difference between these groups. In terms of motivation, it is found that there is a manifest difference between Singaporean Chinese students, Hong Kong students and the other two groups of mainland Chinese students and Malaysian Chinese students in that the former two groups held more positive attitudes. The validity of this was tested between some groups. In terms of self-related belief and learning preference, there is no manifest difference between these groups. Regarding their overall approaches to learning, there is difference between Hong Kong and the other nations in that Hong Kong students tended to employ more approaches to learning than other groups. The validity of this was also tested between some groups.

With respect to other issues which are related to approaches to learning, there appeared to be no manifest difference in the use of approaches to learning between males and females; Chinese background student in the Faculties of Education and Arts tended to use more approaches to learning; the longer students had stayed in Australia, the more they tended to adopt approaches to learning; postgraduate students in mainland China and Malaysia tended to use more approaches to learning than undergraduate students, but to use less learning strategies than undergraduates; English ability considerably affects the employment of approaches to learning, especially for increasing motivation.

Furthermore, by investigating their memorisation learning strategies, the findings of the data analysis also reaffirms that Chinese background students are not rote learners no matter where they are from.

Chapter 6

Thematic Analysis of Qualitative Data

6.1 Introduction

The multi-method approach is known as triangulation, and is described as using more than one method of data-collection in a more extensive study. This involves cross-checking the veracity of individual accounts by gathering data from a number of informants, and from a number of sources then comparing and contrasting one account with another in order to produce as full and balanced a study as possible ("Open University course E111," 1988). In Chapter 5, the quantitative method has been used to scrutinise the statistically collected data from the revised OECD questionnaire by counting and measuring the responses of the four groups of Chinese background students. However, as Bell (1999) points out questionnaire responses have to be taken at face value, but a response in an interview can be developed and clarified. So in this chapter, the qualitative method is also employed to examine the qualitatively collected data from interviews with the purpose of discovering underlying meanings, patterns and themes in the students' responses. Implementing both of these research methods will validate and strengthen the data outcome and lead to more reliable generalisation of the analyses.

6.2 Qualitative research objectives

This qualitative analysis aims to confirm some thematic issues identified in the questionnaire and to explore new ones by examining the discourse produced by the interviewees that was relevant to the various issues underlying some of the aspects in Research Objectives 1, 2 and 5:

- ***Research Objective 1(RO1):*** to identify and examine Chinese background students' learning approaches in Australian tertiary education discourse, by separately investigating motivation, self-related belief, learning strategies, and learning preferences;
- ***Research Objective 2(RO2):*** to explore the linguistic, educational and social factors affecting Chinese background students in their learning an Australian educational discourse;
- ***Research Objective 5(RO5):*** to explore the national identities perceived by the Chinese background students;

The thematic analysis of the qualitative data surrounding three of the research objectives (RO1, RO2 and RO5) in this chapter was then conducted.

6.3 Framework of qualitative research

As mentioned in Chapter 4, the framework of qualitative research in this study is underpinned by constructivist grounded theory. Grounded Theory is a research method developed by Glaser and Strauss (1967). It is a general methodology for developing theory that is grounded in data systematically gathered and analysed (Strauss & Corbin, 1994). Theory develops and evolves during the research process due to the interplay between data collection and analysis phases. It is important to note that the result of a Grounded Theory study is the generation of a theory. Objectivist grounded theory holds assumptions of an objective, external reality, aims toward unbiased data collection, proposes a set of technical procedures, and espouses verification, whereas constructivist grounded theory believes that reality is nothing more than reconstructions of experience (Bond, 1990), a mutual creation of knowledge by the viewer and the viewed aiming toward interpretive understanding of subjects' meanings (Guba & Lincoln, 1994). Constructivist grounded theory was used in this study for the benefit of giving voice to the Chinese background students and reflecting the interactive nature of both the interviewer and the interviewee. The data of interviews were then processed with constructivist grounded theory through discovering data, coding it, and using comparative methods step by step (Glaser, 1998; Strauss & Corbin, 1990).

Grounded theory is an iterative process whereby the researchers move between data collection and analysis, writing memos, axial coding (making links between codes), and creating models. Therefore a computer-assisted qualitative data analysis software program, NVIVO, was used in this study to facilitate such iterative approaches. NVIVO is a research software package for qualitative data analysis that allows the researcher to import and code textual data, edit the text; retrieve, review and recode coded data, as well as search for combinations of words in the text or patterns in his or her coding, and import or export data from and to quantitative analysis software (Strauss & Corbin, 1990).

Several books discuss the use of NVIVO (Bazeley, 2002; Bazeley & Richards, 2000; Gibbs, 2002; Morse & Richards, 2002; Richards, 2005; Lyn Richardson, 1999). NVIVO is a flexible qualitative research tool catering for fine grained qualitative data analysis derived from rich records built up from observations, interviews, document analysis, literature reviews and other research media. The early version of NVIVO was NUD*IST (Non-numerical Unstructured Data, Indexing, searching and Theorizing) which was first created by Professors Lyn and Tom Richards in the early 1980s. In NUD*IST, 'a project had two parts, one for data documents and the other for an index in which researchers created nodes as containers to store ideas, coding, and the results of searches (Richards, 1999 p. 413)'. NVIVO was first produced in 1999 and was designed to provide the same services as NUD*IST but in a much more refined way. One distinct advantage of NVIVO is 'the ability to organize data and its analysis efficiently. Security passwords can also be programmed and multiple backups made to protect the data and analysis from theft or loss (Bringer, Johnston, & Brackenridge, 2004 p. 250).'

Therefore, the analysis in NVIVO following grounded theory was made in this study by theorising the process of open coding, writing memos, axial coding, and modelling. The coding processes in grounded theory started with open coding or dissecting the data into discrete parts, examining the data for similarities and differences, and grouping together conceptually similar data to form categories. Strauss and Corbin (1998) described conceptualising, or giving a conceptual name to categories (represented in NVIVO by nodes), as the first step in theorising. Writing memos helped the research move from a descriptive mode of placing conceptually

similar passages together to thinking analytically about the emerging concepts. A memo was attached to each node in this study to justify the selection of passages and the naming of a node. Thus, the category name was clarified, passages compared, and categories renamed, merged, or dropped accordingly. 'Memos serve multiple purposes within grounded theory including clarification, category saturation, theoretical development, and transparency '(Bringer, Johnston, & Brackenridge, 2006, p. 252). The phase of axial coding was to make comparisons at the category and subcategory level in which the analysis moved from dense description to explanation of the phenomenon of interest. Glaser and Strauss (Glaser & Strauss, 1967) described it as the constant comparative method, including comparing incidents within each category, comparing categories to each other, clarifying the developing theory, and writing a coherent theory. In the last, models were built up of the relations of nodes or attributes to explore theory.

6.4 The interview process

As one of the major two data-collecting methods, one conspicuous advantage of interview is its flexibility. An appropriate interview process can follow up ideas, probe responses and investigate motives and feelings, which the questionnaire can never do. The way in which a response is made, such as the tone of voice, facial expression, hesitation, etc., can provide information that a written response would conceal.

The interviews, as mentioned in Chapter Four, were semi-structured. All the questions were open-ended and prepared in advance, but the order and the exact wording of the questions varied depending on the student, for example his or her knowledge of an issue, and the degree to which he or she elaborated while responding. The questions were of various types and some overlapped in content with items in the questionnaire. Some questions were only related to general background, asking students about their learning experiences, relationships with their teachers and the Australian learning environment; others were to probe students' opinions of their approaches to learning and national identities of students from mainland China, Hong Kong (SARs), Malaysia and Singapore. Notes were also taken during the interviews.

A comment needs to be made about the construction of the interviews. Although interview was used as an exploratory device, some conscious efforts were made not to put words into the participants' mouths and not to guide or intimidate the participants in any way. Every effort was made to avoid prompts to questions and suggestions of possible answers. If a question was not initially clear for the interviewee, it was soon rephrased in another way without giving any hints about the expected answer. If the interviewee was unable to elaborate, or felt uneasy about certain question, those questions were skipped immediately. The researcher only persisted in probing for answers when the interviewee actively provided an unclear answer. The role that the researcher played in the interview was to encourage the interviewees' desire to express their own voices, and to make every effort to clarify their responses.

Because the participating student interviewees were busy with their courses, they were given the opportunity to decide the time and place of their interview. The researcher was very willing to accommodate their wishes. The venues for the interviews varied widely, and included the researcher's office, participants' homes, a private room located in the library, and even a campus coffee shop, wherever was convenient for the interviewees. This is a totally interviewee-centred arrangement in order to create a friendly, relaxing, even lively conversational atmosphere.

The original target groups consisted of 12 Chinese background students who were studying at the University of Tasmania at the time. Of these students, five were from mainland China (three males and two females), three from Malaysia (two males and one female), two from Singapore (one male and one female) and two from Hong Kong (one male and one female). This reflected the proportion of the respective groups of students participating in the questionnaire so as to make the two analytical methods better matchable and comparable. As each participant's anonymity had been guaranteed for the research, codes were attached to the participants' statements rather than their actual names. Mainland Chinese male and female participants were coded as CM and CF; Hong Kong male and female participants as HM and HF; Singaporean Chinese male and female participants were identified as SM and SF; and Malaysian Chinese male and female participants as MM and MF. In order to

distinguish the individuals within each of the eight categories, a number was given after each abbreviation, such as CM1 or MM2.

Two major types of interviews were conducted, although both of them touched upon the same issues. One part, a vast majority of the participants belonged to (CM1, CM2, CM3, CF1, MM1, MF, HM, HF, SM, and SF), featured the student's active participation in elaborating their viewpoints on the topics, and at times they even dominated the chat which was very welcome to the research. Conversely, the remaining group of students (CF2 and MM2) showed apparent nervousness no matter how the researcher tried to generate a relaxing atmosphere. This was probably due to their young age. In this circumstance, the interview had to use a question-answer format, in which the interviewees just answered what they were asked, responding to the questions with minimum development of the research themes.

The interviews were recorded by a digital voice recorder, JNC, with a microphone extension. The duration of each interview varied and ranged from thirty-five minutes to one hour and twenty minutes, depending on the degree to which the interviewee was willing to express his or her views. On average, each interview lasted for fifty-five minutes. Each recorded interview was transcribed into a Word document. Thus, quotes from participants used as illustrations in this chapter were neither added to nor edited by the researcher. All quotes, which are described in italics, were verbatim transcripts of what was said by the participants. However, some clarifications or supplementary explanations have been indicated by ellipses and round parentheses respectively. As a result, the reader can clearly access the point of the statements without losing the meaning. The selection of suitable quotes was a challenge because the researcher's subjective view could easily affect the process. Attempts were made to select a broad and informative representative range of voices, whilst also taking care to maintain the balance of both the elements.

In the processing of qualitative data from the interviews, it can be seen that the theorising was done by using a bottom-up approach in which analysis progresses from raw materials to theories. A bottom-up approach assumes that a topic is designed from the bottom level of individual evidence topics up through the top-level topics that will be defined. This approach starts with data or evidence from

interviews which contains a good representative sample of the words or phrases related to the research aim, and then these words are grouped by successively higher classifications (Cohen et al., 2003). In this process, some issues emerged from the interviews pertaining to the study topic. However, Glaser and Strauss (1967) argued that the initial inductive nature of grounded theory does not preclude the use of a framework of quantitative research to support its initial analysis. Consequently, the parts of approaches to learning and national identities in qualitative research were guided by the topics of the OECD questionnaire, which were categorised as main themes and sub themes in the analysis.

Therefore, three main themes and three sub-themes were categorised from the OECD questionnaire or theorised from the interviews. These are listed as follows:

Main Theme 1: APPROACHES TO LEARNING

- Sub Theme 1: Learning strategies
- Sub Theme 2: Motivation
- Sub Theme 3: Self-related beliefs
- Sub Theme 4: Learning preferences
- Sub Theme 5: Comparison of their approaches to learning

Main Theme 2: LINGUISTIC, EDUATIONAL AND SOCIAL INFLUENCES

- Sub Theme 1: Linguistic influences
- Sub Theme 2: Educational Influences
- Sub Theme 3: Social Influences

Main Theme 3: NATIONAL IDENTITIES

- Sub Theme 1: Of mainland Chinese students
- Sub Theme 2: Of Hong Kong students
- Sub Theme 3: Of Singaporean Chinese students
- Sub Theme 4: Of Malaysian Chinese students
- Sub Theme 5: Comparison of their national identities

6.5 *Analysis of qualitative data outcomes*

NVIVO was used in this study to handle qualitative data systematically. Traditionally qualitative data analysis is manually coded. Researchers can spend large amounts of times to read through lengthy pieces of texts and code the data for identifying emerging issues or themes. NVIVO is designed for researchers working with qualitative data, who need to combine subtle coding with qualitative linking, shaping, searching and modelling. NVIVO is particularly helpful deep levels of analysis. With the use of NVIVO in this study, the researcher initially transcribes the texts of the interviews from the recorded data and imported into the NVIVO document constructed solely for this thesis. The coding process relied on the identifying emerging concepts, issues, problems etc in the interview texts. However the identification of the themes was not confined to the 'emerging' phenomenon as the researcher also took into account the content of the questionnaire as well as issues emerging from the literature.

6.5.1 Approaches to learning

Approaches to learning can be simply described as ways that students use to approach their study. According to the OECD's definition, approaches to learning are made up of three parts, learning strategies, learning motivation and self-related beliefs. Learning strategies are plans used by students to help them understand information and solve problems in order to achieve their goals. Learning strategies focus on making students good learners by teaching them how to learn and how to use what they have learned to solve problems and be successful. Motivation refers to the initiation, direction, intensity and persistence of behaviour. Motivation is having the incentive to do something. Students who do not know or use good motivation often learn passively and ultimately fail in school. Self-related beliefs refer to views that learners form about their own competence and learning characteristics. These views have been believed to have considerable impact on the way learners set learning goals, the strategies they use and eventually their achievement. In addition to these three elements, learning preferences are also incorporated in this study as part of approaches to learning that refers to the practice used by OECD (2003) in the PISA study, in which cooperative and competitive preferences of learning are distinguished.

Within the framework of these analytical parameters, the approaches to learning by mainland Chinese students, Hong Kong students, Singaporean Chinese students and Malaysian Chinese students were examined respectively to identify their own distinctive characteristics, and then compared with one another in order to construct a whole picture of overall Chinese background students' approaches to learning.

Learning strategies

Learning strategies refer to methods that students use to learn. This ranges from techniques for improving memory to better studying or test-taking strategies. There are five learning strategies set in this study, memorisation, elaboration, organisational, affect and control strategies. From interviewing mainland Chinese students, it was perceived that the degree of memorisation is certainly limited without the basis of a good understanding. In order to enhance understanding, elaboration strategies are often applied by these students when reading. CM1, CM2, CM3 and CF1 all expressed this view. The following passage of CF1 could represent this point of view clearly for them:

> *I don't think to memorise is a good thing to do. I think the main thing for reading is to get ideas and make that into your own ideas, connect what you read to the reality and how you can put that theory into practice that is the most important thing to do. That is my purpose of reading. Personally, whenever I read I want to learn something that is connected to my assignment or to my teaching.*

Her remarks accurately reflect the essence of what Elaboration Strategies are, that is, relating new material to prior learning and applying it. However, when language for instruction is not proficient for a student, memorising first has to be the provisional choice to achieve what he/she wants. CF2 and CM1 voiced the same thoughts. CM1 said:

> *The most difficult thing is English. I have to do a lot of tests and assignments and essays. This is why I must remember the knowledge of my textbook. Because of the test, I have to pass it.*

Hong Kong students, both HM and HF revealed that they still use memorisation strategies in their learning at times to help them understand. It seems that in this case, memorisation is a pathway for better understanding. This accords with the statements of Marton in an investigation conducted in Hong Kong.(1996)that "CHC students learn repetitively in the belief that memorizing can lead to understanding", This is what HM said:

> *Cause' some of them are too complex, the only way I think to run all those things is to memorize this and try to chip them out and see whether it works or not.*

The interviews of the Malaysian Chinese students revealed that they particularly adopted Control Strategies in their learning. Control Strategies are used to check what one has learned and to work out what one still needs to learn in order to ensure that one's learning goals are reached, just like MF said:

> *There're things maybe due to the language knowledge, so I have to scrutinise it from times to times. (MF)*

The Singaporean Chinese students interviewed indicated a keen desire to get rid of memorisation from their school life. This was one of the key reasons they chose to escape from the educational system of their own country. On top of that, they also expressed a good tendency to use Elaboration Strategies to relate new knowledge to the practice.

> *It's hard for me to memorise from listening, reading, looking. I need to apply. When it comes to the arts, everything is connected to one another. So something happens to my everyday life can be used as an example, say sociology, with friendship groups that I see, with people I see how they are related to sociology. I find I learn best that way. So I really enjoy. But, in Singapore, I would be useless, even looked down upon. If you can't memorise enough, that is bad, nothing else matters. (SM)*

> *For me, I can learn anything until I understand it. Understanding helps me to memorise things, or not memorise...If you understand something, it's not*

just about some regurgitation. You need make something really belong to you. To belong to you, you need to really understand and fully make that material yours before you're able to fully utilise it. I am doing medicine; we try to put reasons behind everything. I prefer to understand things, in that way, you have interest in finding out more fool of yourself, make your discovery, rather than accepting everything you fear. (SF)

Generally, in terms of learning strategies, there are two themes emerging from their remarks. One is the issue of language, which considerably affects the selection and use of learning strategies the students intend to adopt. For these students, the real problem was to do with language, together with 'the related one of coping with culture shock and homesickness. These social difficulties naturally impel already cohesively-inclined international students to work and live in their own ethnic groups' (Watkins, 1996, p. 277-278)', which in turn reduces the chances for their English to improve. The other point that must be addressed is that the group of overseas Chinese background students, no matter which country they were from, was greatly different from students in their own countries, in other words, they are groups of students with distinctive characteristics which have been discussed in Chapter 2.

It is noteworthy that the researcher discerned that other Chinese background students feel susceptible to the type of 'memorisation' favoured by Hong Kong students. In Western cultures educational practitioners have frequently assumed an interpretation of memorisation that was equated with mechanical rote learning. Therefore in Western countries memorisation and rote learning are generally equated and it is commonly believed that they do not lead to understanding. It is in turn believed that memorisation does not enhance understanding but, rather, the two are generally considered to be mutually exclusive. However, in Marton's 1996 study (1996 p. 76), a prevalent distinction was already made between mechanical memorisation and memorisation with understanding. One said that 'Mechanical memory means something is memorized through (a) mechanical process, not much thinking or understanding involved. And understanding memory involves thinking in your mind.' A new understanding of 'memorization and understanding are being intertwined' was further identified by Marton (1996). His research results enable us to see that memorisation can be used to deepen and develop understanding.

Tang (1991) furthermore defined memorisation with understanding as 'deep memorizing', a strategy used particularly for examination preparation (Thomas & Bain, 1984). Deep memorising is such a process: the students have already made sure they understand, as they need to for their own deep purposes, and then as a separate exercise, for assessment purposes, they rote learn (Tang & Biggs, 1996). It can be argued that the tendency of Western educators to equate 'memorisation' with 'rote memorisation' has led to an unwarranted neglect of the role of memorisation in the development of high quality learning outcomes (Lee, 1996). Such statements were evidenced by the accounts of HM as above.

In addition, Biggs (1996 p. 272)found that there is other 'noise' to cut through before the meaning can be apprehended, so that repetition is necessary to reduce the proportion of noise to message. In his study, he particularly related it to the Chinese language system. Chinese is a character system that requires this repetitive strategy more than does an alphabet system. As SF described:

> *To me, maybe because of the way Mandarin has been taught in Singapore, it was all about route learning, there wasn't many understanding in terms of how the character is formed. As a result of that, I was struggling very much with the language. Because, to me, Chinese characters were obviously things I had to memorise. I didn't know there's a way around that. (SF)*

This could help explain why memorisation is asked of Chinese background students to study in Singapore and which impelled the two interviewees to study in Australia. It can also be concluded from Biggs' theory that coming from the educational settings in mainland China makes their overseas students oversensitive about the concept of memorisation for fear of being regarded as rote learners, although repetition does help their understanding of what they have learned.

This study further provides evidence that it is necessary to exercise caution when making assumptions about the learning methods of students from other cultures. It is the author's hope that the results of the present study will help western educators to understand more clearly the learning practices of Chinese background students. Western educators are also encouraged to set aside previous assumptions made about

student learning and to explore learning practices and understandings developed with an open mind.

Motivation

The two-motivation system theory stemming from OECD was used in this study. This consists of interest and instrumental motivation. Interest is intrinsically generated motives, also seen as intrinsic motivation. And instrumental motivation derives from external rewards such as future prospects or praise, also taken as extrinsic motivation. Westerners have seen intrinsic motivation as the only way of defining what is 'meaningful and worthwhile', and therefore that intrinsic motivation is 'the precursor of the deep learning strategy in Biggs' words (1987a). Confucian philosophy differs from Western thoughts that see extrinsic motivation as undermining intrinsic (Deci, 1975), and suggests rather that 'there are golden houses and beautiful girls in books' (Lee, 1996), extrinsic rewards associated with fame, wealth, a beautiful wife, and upward social mobility. The Chinese background students in the qualitative research regarded matters pragmatically. Rather than waiting for internal conditions to be right, they feel that deep learning strategy may be activated by a head of mixed motivational steam: personal ambition, family face, peer support, material reward, and yes, possibly even interest.

With respect to the mainland Chinese students, they showed more instrumental motivation than other groups, some of them, for example CF2, struck a good balance between the two motives. CF2 even put interest above instrumental motivation.

> *I am interested in my course. In China, my classmates worked hard to look for a job, but few of them got a good job. But if I graduate here, I can get a good job and I will migrate here. (CF2)*

> *The most important thing that I can learn what I want to learn, what I am interested in. My studies more intentionally or purposeful, I am not wasting my time on things that I should not do. (CF1)*

> *In terms of the selection of majors, my main concern is interest. I wanted to do something I am interested in, otherwise I won't work hard, and the*

result will not be good. So doing this course is my interest or my love or something. I haven't thought much about the job prospect, the more concern is how to improve yourself, then the job prospect and salary will improve with your ability. (CF1)

It is noted here that CF1 and CF2 were from the Faculty of Education, quite different from courses like accounting and IT which are popular with students planning to immigrate to Australia as these courses have higher points for immigration purposes. In consequence, most of the mainland Chinese students at the University of Tasmania took these courses. In terms of instrumental motivation, all of the interviewed mainland Chinese students wanted to immigrate to Australia, although the degree to which they desired this varied from person to person. Nevertheless, they were still thinking of going back to China for a good job. Some of them also had a mind to experience a different country, different lifestyles, and learning styles and to provide themselves with a training opportunity.

Mainland Chinese students like me like to immigrate to Australia, then maybe want to go back to China and get good jobs. (CM1)

I mean I like to do some courses which I like. But I can't do that. I will immigrate to Australia or go back to China to find a good job. This is why I have to study my International Business. I don't like commercial subjects very much. I like arts or some pictures like this. (CM1)

It's just experience I think. It's just a life I've been looking for or expecting. (CF1)

The first reason is that you go abroad to study, then you come back to China, to set up your business, or just go to an overseas company, you can get good salary, because if you go abroad to study, you have an overseas experience. I also want to immigrate here, but this is not the main purpose. (CM2)

Mainland Chinese students have stronger mind to achieve their goals than Hong Kong, Singaporean and Malaysian Chinese students. (CM1)

The registers of the mainland Chinese students were in line with the findings by OECD. OECD (2003) notes that 'students with less advantaged background are no less likely to have such motivation. The evidence shows that students driven by factors such as job prospects are more likely to set and monitor learning goals and therefore give themselves a better chance of performing well.' Comparing with other national students, mainland Chinese students coming from disadvantaged backgrounds did show a stronger inclination to achieve what they wanted in their future life. A disadvantaged background herein does not only refer to the individual family backgrounds of students, but more importantly to the social profiles of its citizens in the international arena, for example its reputation and its accessibility to other countries. In this light, mainland Chinese students are more likely to make every effort to achieve their goals. This was evidenced by such proud assertions as:

In learning, maybe I am better than them. (CM1)

I often go to see my lecturer. My lecturer told me that you are the first student coming here to see me. I think she feels that Chinese students are very studious. (CM1)

But I know my classmates from Singapore, Hong Kong, Malaysia. The most of subjects are not very good, or at the intermediate level. On the top level, except locals, are mainland Chinese students. They are very familiar to control themselves to study, because they want to pass the test or they want the degree. (CM1)

University teachers thus need to look carefully at where there is the greatest scope to foster stronger motivation and which type of motivation has the best chance of making a real difference to the learning perspectives and performance of each individual group of students.

The Hong Kong students tended to possess both instrumental motivation and interest. In terms of enquiries about whether they wanted to immigrate to Australia, both HM and HF replied 'No.' In giving reasons why they came here to pursue their education, they expressed a strong desire to escape from the Chinese traditional educational environment where the prevailing knowledge-based teaching systems disregard individuality. In Australia, they were doing what they were interested in and they aspired to have successful careers back in Hong Kong after graduation and to do what they liked to do.

> *Yes, I do what I want to do here, it's my interest. I am interested in doing language subject that I choose, just study language subject in uni. I am really happy with what I learn. (HM)*

> *My parents think I'd better to learn some more English from overseas so I can experience more if I come back I can have a good opportunity to get a good career for my future time. That's the main reason for me to come here... If I only stay in Hong Kong, I couldn't explore my experience of another world. (HM)*

> *Schools (in Hong Kong) keeps pushing students to do whatever they want for a short period of time in which students like me feel very stressful with it. So in a way the educational system is challenging. (HM)*

From the accounts of Malaysian Chinese students, a sequence was found of importance, interest, broadening their horizons, independence-training, and English improvement:

> *I like my course very much. (MM1)*

> *I like music (his major). (MM2)*

> *Yeah, of course, because I chose this program myself. I chose something out of my interest. (MF)*

Because this is more near to Malaysia. This is also a very good place to study. I can also know other countries as well, different environment. (MM2)

I want to learn different cultures. One thing, I want to be more independent, not depend on my family, because in Malaysia, once every holiday, we can go back, around two months, we can directly go back to hometown. But here, I need to stay out for around one year and go back for a holiday for two months. If I got anything, meet some problems here, I can only solve it without my family. Secondly, want to improve my English. (MM1)

In terms of immigration, two out of the three Malaysian interviewees expressed their interest in remaining here after graduation. MM2 said: 'Maybe I am going to stay here after graduation'. However, MM1 replied: 'No. I think the living style is totally different. I feel that the life here is too boring and nothing to do at night. They will totally stay at home at night and watch TV.'

However for Singaporean Chinese students, getting a degree is their prime reason for studying abroad, because of the intense competition for a livelihood in Singapore. Interest is a secondary consideration in view of more opportunities in Australia for these students to follow their own interest.

Job perspective is the priority, not interest. To survive in Singapore, you need to get a degree to get a job, a well-paid job. Because, those low level jobs like manual work and part-time they don't pay well. A lot of them go to foreign nationals. Labour is cheep, but management positions get paid really high. So I right try to get above that line. (SM)

I wanted to do medicine. In Singapore, there is one medical school for population of about 4 million plus people. That medical school has preference to take in male students, because they believe that female students wouldn't be contributing to the workforce for their entire working lifetime. So they believe that the male should be able to contribute more, so with that sort of bias around. (SF)

As regards immigration, both of the interviewees expressed that they were not sure where to settle after graduation. They were happy to try different opportunities, just as SF said:

> *I'd like to see myself working back there for a time as well. On a permanent basis, I am not sure. Do I want to be staying in Australia? Definitely not. Do I want to be staying in Singapore straight after I graduate? No I don't think myself doing sort of thing either. I mean I don't like to hold myself down to a place. I believe in hopping around you know. (SF)*

Singaporean Chinese students were quite proud of being Singaporeans and did not want to confine themselves to a foreign country for life. Being in a developed country, Singapore nationals can travel to all developed countries and most developing countries without visa problems. They do not have the same worries or trouble with many restrictions that mainland Chinese people suffer. Singaporean Chinese students are able to work anywhere as long as they get a proper degree. Similarly with Hong Kong students, this must be the same reason that Singaporean Chinese students choose not to remain in Australia after their graduation.

Self-related beliefs

Self-related beliefs refer to self-confidence, indicating that such beliefs are a positive factor in approaches to learning. 'All aspects of students' self-related beliefs looked at in PISA are closely related to performance and in particular students who think that they can succeed in challenging or difficult learning tasks (self-efficacy) are more likely to adopt strong strategies and to perform at high levels of reading literacy (OECD, 2003).'With regard to this characteristic, almost all the participating interviewees showed some degree of confidence in their study and they all said that they had faith in completing their degree in the scheduled time. When asked whether CM1 could do well in his course, he replied:

> *Of course, I must overcome all of the units in my study. In China, it is easy to graduate. But here, in a foreign country or English-speaking country to me, this is challenge, I like challenge. (CM1)*

> *I think I will be able to achieve what I've learned. I can fit myself into the career that I really enjoy, with what I've learned also...Yes, I am confident with what I am doing. (HM)*

I am confident. Once I pay more attention to my subject, I can get good marks. I think Pass is easy, but HD is very difficult. (CM2)

I think so. If you don't have confidence, you can't do well. (CF2)

I quite believe in myself in learning. (MM2)

Only one student gave a different picture:

I am not confident in learning well. . In my study, from secondary until now, I am not quite confident with my study. Maybe because of my fail during my foundation, so I feel that I don't know...but I think I must complete my degree in my specific time. Because of financial, I must finish my degree next year. I will try my best to do it. (MM1)

Clearly overseas Chinese background students are a subset of the Chinese population in their own countries. They are a group of people who decided that they were independent enough to move out of their comfort zone, to travel across waters to study overseas, and they would have established that sort of independence at home first. That sort of independence further builds a certain amount of self-confidence in their guest country.

Here again, schools need to think carefully about the priority they give to building on students' strengths and to addressing areas of weakness.

Learning preferences

Learning preferences are made up of cooperative and competitive preferences. Students, who have the attribute of cooperative preference, tend be involved in group discussion. By contrast, people who like to learn by themselves generally have an inclination towards competitive learning. Student preferences for competitive or co-operative learning are not highly correlated with their performance; each may play a role in different situations and in motivating different students. However, it is well recognised that there is no right or wrong regarding learning preferences(OECD, 2003)only an awareness of learning preferences for different learning groups of Chinese background students.

In examining these groups of Chinese background students, the majority of interviewed students indicated that they liked group discussion, except for students who felt that language difficulties hindered their participation.

> *Yes, I like group discussion. I can share ideas with your classmates, different people have different ideas, and so you can have different ideas for your subjects. I think a good discussion is very useful. (CM2)*

> *I prefer group learning which you interact with one another. (SF)*

> *I don't like group discussion, because I can't speak English very well. In my class, 70% of the students are from other countries, their English is better than me. Sometimes I can't communicate with them very much. (CM1)*

Simultaneously, students also manifested a preference for studying by themselves.

> *Personally, I like studying at home by myself lonely. Because actually, I want the condition is very quiet, then I can learn. If very noisy, like in the library, it is very quiet, but still a little bit noisy. (CM1)*

> *For music, something you have to learn by yourself. (MM2)*

Therefore, cooperative preference and competitive preference are not mutually exclusive and can both be manifested within a single student.

Summary

By looking at the four aspects of learning approaches respectively used by the four groups of students, some distinctive features of each group were then identified as follows:

Mainland Chinese students strongly value the function of understanding in learning and they also pay heed to the use of elaboration strategies. However, sometimes, the proficiency of their English affects the adequacy of utilising these strategies. They also showed more instrumental motivation than interest when compared to other groups. It was remarkable that evidence revealed that all of the interviewed mainland Chinese students wanted to immigrate to

Australia. In terms of self-related beliefs and learning preferences, they did not show any difference from other groups, except for the English language factor affecting their engagement in group discussion.

Hong Kong students revealed that they quite favoured memorisation strategies, in the belief that repetition can improve understanding. Evidence also showed that Hong Kong students were quite motivated by their job prospects and their interest. In regards to immigration to Australia, it was not a strong factor.

Malaysian Chinese students were found to pay attention to Control Strategies, apart from Memorisation and Elaboration Strategies. With regards to motivation, they put interest and experiencing new things into consideration. Only some of them wanted to immigrate to Australia after graduation.

Singaporean Chinese students displayed a strong desire to avoid rote learning which they had been forced to use in their own country, and to use Elaboration Strategies for a more thorough understanding of the knowledge they were taught. The strongest motive for them to study in Australia was to get a degree in order to gain a decent job back in their own country. Interest seemed also to play a part in their decision to study abroad. Neither of the two interviewees were perceived to be interested in immigration to Australia due to their pride in being Singaporeans. However they showed a strong desire to explore the world.

In this qualitative research, one of the most notable findings in the students' approaches to learning arose from the discussion of 'study hard' with SF and must be highlighted. In her accounts 'study hard' had a totally different clarification:

> *Study very hard, there's a very traditional idea of studying very hard means you sit there in front of your books, say, you spent a good part of each day, in front of them you do nothing else. But try to get that information until ...No. I don't learn like that. I guess I tend to associate the words 'study very hard' with someone puts in X number of hours each day. I don't keep myself in that restriction. I say, I want to complete this task and do my best to get it done. Because I believe there is more toward life than studying. (SF)*

It was noted by Biggs (1996, p. 275) that in Confucian heritage, in contrast to Western culture, success achieved through hard work is valued more highly than that gained by high ability. Ability itself is perceived by Chinese parents and students as an attribute that can be modified by effort. Thus effort is greatly valued in one's success in Confucian heritage, like a traditional Confucius thought, that 'there are golden houses and beautiful girls in books' (Lee, 1996). However this concept of effort was faced with a real challenge that of whether reading books is a major effort. In SF's interpretation, 'study hard' for her did not mean reading many books. This is an illuminating issue for students in modern society who need to reflect on what efforts they should expend on their study, and in what manner.

6.5.2 Linguistic, educational and social influences

Linguistic, educational and social factors have a considerable influence on students' approaches to learning. Linguistics is the scientific study of human language and speech. The linguistic factor in this research context refers to English. The degree to which English is acquired makes a big difference for students in the selection of their optimum learning approaches. For instance, the top-down reading strategy is seen as an advanced method for the logical understanding and grasping of knowledge. However, it was repeatedly proved that for students without a mastery of English, the bottom-up strategy is empirically and practically more suitable for their reading. This has been discussed in the learning strategies section above. Therefore, the study of linguistics was focused solely on the ways in which different Chinese background nationals had been treated in the educational context according to their different English levels. Educational factors herein mainly reflect a state of equality and fairness in the course of sharing educational resources, and in relations between the teacher and students, which further affect students' approaches to learning, especially self-related beliefs. Finally, social elements underlying this study, and that played a part in students' identities, were probed. This part of the chapter examined the thoughts and ideas of these students surrounding the three factors in order to explore and identify equality and inequality, fairness and unfairness experienced by these Chinese backgrounds students in Australian tertiary educational backgrounds.

Linguistic influence

From the linguistic perspective, analysis of these interviews was conducted not to focus on a scientific study of language structure, production, and use, but to explore the ways in which the four different groups of Chinese national students were treated in view of the differences in their English proficiency levels within Australian educational discourse. IELTS, as the sole, legally accepted English test for Australian tertiary education, has been widely used over many years. Each test consists of four elements: listening, speaking, reading and writing. The minimal requirement for English for most Australian universities is an average score of 6.5 with at least 6 points for any of the four parts. The majority of international students are only allowed to study in Australia after passing the IELTS, but some are from countries in which English is their first language. Of the four research target countries, only Singaporean students do not need to take IELTS. Students from the other three nations must take IELTS prior to applying for university enrolment. This situation was verified by a Singaporean participant with some pride.

> *Singaporeans don't need do the IELTS test. Yeah, generally we had a good enough grasp of English. I think even the most minimal English proficiency of Singaporeans can afford overseas education. Singaporean first language is English not Chinese. Mother tongue treated as originally social bilingual is the second language. (SM)*

The students were first asked questions regarding their levels of English proficiency levels by country or region in order to gauge their feelings about their own English. Then the role of English proficiency in forming relations between the teacher and students, or in affecting the attitudes that Australian teaching staff hold towards different international students was examined.

From the interviews, it was found that mainland Chinese students had comparatively less proficient English. They often encountered some language problems, such as those stated by CM2:

> *I have difficult in reading. Sometimes, you know the meaning of the whole sentence; you never know the meaning the author tells you. Maybe it's*

about grammar structure. It's impossible to consider learning strategies. I will first look at the dictionary.

Apart from feeling lucky about having English as her first language, SF also made a summary of the English levels of these four national students:

I will say Singapore is the number 1 again. I just think language is just huge, because I heard from people saying, you know, oh, you can speak good English. I feel a bit offended. Singaporeans would be the most easily accepted. I would say, Hong Kong is No. 2, I have to go Hong Kong, image of Hong Kong, being British colony until only recently, being a financial hub in Asia. I think they would have a better impression of Hong Kong, then after that, Malaysians because Malaysians can speak English to some extent and Chinese students.

A similar account was also voiced by MF, about a Malaysian Chinese student, in which a different but easier English language test than IELTS was administered by an Australian TAFE enrolment officer just because of her Malaysian identity.

Maybe sometimes, they tend to have a kind of presumption that Malaysian students, they have a higher standard of English compared to Chinese from other countries. Because, I give you an example, the other day, my sister just came to Tasmania, she wanted to enrol in TAFE, and she didn't sit for IELTS. When she went to the college, she wanted to get herself enrolled. The first thing they asked her is, 'where do you come from?' my sister mentioned: 'Malaysia.' then. Automatically, that officer said that 'oh, I think you should be able to learn here.' this is a kind of presumption. When they heard that oh you are from Malaysia, ok, you have got that exposure before, you have that knowledge. (MF)

The research found that the ability to use good English made a big difference to students in establishing good relationships with their teachers. Some Australian teachers had a preference towards students with a better grasp of English, obviously because their better expression of themselves made them more understandable. Singaporean Chinese students were much favoured by these teachers due to their

English skills. When asked whether their teachers favour them because of their English, SF said:

> *Ok, I think again language plays a part. I think it does. I believe I've been very much blessed with the opportunity of having English as my first language. I think that made learning definitely a lot easier to in the environment of such English as a mother tongue. I heard no people from Hong Kong, whose English is very good. But most of their English is atrocious. Malaysian friends are just as good, not better.*

Conversely, some mainland Chinese students, because of their perceived 'dishonourable' English, really had different experiences with their lecturers and even suffered a lot of agony through their studies. A story told by CM3 was really striking and sounded distressing:

> *My teacher always liked to say: the IELTS benchmarks should be four 7s (scores respectively for listening, speaking, reading and writing). She often said in front of students that she thought the requirements of IELTS must be at least 7 score for each part of it, otherwise, 'Whee' in a contemptuous tone, regardless of our feelings at present, for most of our IELTS were above the university requirements but under average score 7. I think her remarks were very irresponsible. Because the university must have reason to set up the current English requirements, under that language starting point, and we can do well in our courses as long as we study hard enough. And in fact we did. Her remarks not only were dubious of shirking responsibility of the provision of good education, but also discouraging, even humiliating. I don't like her.*

The statements of some student interviewees indicated that proficiency in English did play a part, not only in its affect on their approaches to learning but also in forming relationships with their Australian teachers. Some negative impacts on these students manifested themselves as a lack of responsibility displayed in some teacher's behaviour towards them.

Educational influence

From an educational perspective, most of the participants pointed out that the vast majority of Australian lecturers were nice and friendly. However a few of them were still discerned as holding different attitudes toward different national groups of students. Basically, most of Australian lecturers were very kind and polite to these students, as expressed by CM1, CM2, MM1, MM2, and HM:

CM1said: *Australian teachers treat all the students the same, because this is the rule for teachers.*

CM2 said: *at the university, we are treated very equally.*

MM1 said*: Australian lecturers treat Asian students quite fair.*

MM2 said: *Actually, lecturers are kind and teach well.*

HM further elaborated that:

Australian teachers treat fairly to Asian people, in which they could spread their civilization to other countries as well. I think Australian teachers will treat fairly to different Asian students to Australia.

All of the students participating in the interviews described the differences in education between Australia and their own countries or regions. And again, they all expressed their preference for the Australian education system and environment. A good number of advantages were spotted by these students.

In what follows a Singaporean Chinese recounted his feelings:

I found it is easy at first, because education system here doesn't focus much on memorisation. Not memorising the whole textbook but understanding its content. I really, really enjoy this education system, not just because of its less work but less required of work. I am able to do more work if I want to. Because I find it interesting, I want to be involved in this understanding rather than memorising. Maybe this is my style of learning that facilitates my interest. I noticed that the difference in the teaching style was teachers here were less formal, teachers were more respectful to all students, and teachers were more open to rowdiness what was viewed in Singapore as dissent and as rebellion. (SM)

He also compared the Australian educational system with Singaporean ones:

In Singapore, when you go for a lecture in a university, you have to write fast, you have to catch up, if not you will be left behind. Because here, lecture notes on the internet, in the library and there is not much emphasis on competition but it is on understanding and less on memorising and competition. I think it is the big difference on the tertiary level. (SM)

The Australian educational discourse also provided students with more opportunities in subjects which were viewed as trash in the students' own countries, said SM. He then added:

Over here, there are more opportunities for other subjects, like social science, humanity. It's arts degree, and arts degree in Singapore is really, feel that is trash in a way, extremely describing it trash. I really didn't like it. It also affects my identity. I really felt like a bad student in Singapore, just because my interest.

A female Singaporean Chinese student proudly and joyfully mentioned a change in her approaches to learning in Australia:

I definitely said it (approaches to learning) has been changed. And the change would be now more in a kind to do group work. It's impossible to do all the work on your own. I mean why you even bother trying when you can do group work and make the learning process a lot smoother and a lot easier for everyone. (SF)

A Hong Kong student expressed his understanding of the Australian educational system, and also made a comparison between Australia and Hong Kong:

Compared to learning in my own country, I find it easier to learn things rather than the time that I was in Hong Kong. Cause' they set up an assignment in a long period of time before you actually get into work, so you get extra, extra more time to do all these things, as long as you schedule your time... Better than those in Hong Kong, because in here, when I study, I can prove myself as well. I learn all the things here then we actually, you know, think of after one or two years' time, I can think what I've learned at the uni. would actually help my future career. But in Hong

Kong what I learned is just to get passed the exams, it wouldn't really, you know, help me on my future career. I wouldn't really use all those things I learned in Hong Kong to put into an actual case in the real life. That's the point. (HM)

A female Malaysian Chinese student was quite content with the way her teacher worked with her:

She put down some comments, and I explained to her why I did, so then she said, 'ok, if you think this is important you have to more elaborate, tell me why do you want to put it there'. And then she accepted that. She just wants more of my own explanation, my reason for putting that in. I think sometimes it's not only arguable, but it's negotiable. (MF)

A male Malaysian Chinese student expressed similar views:

Here, all the lecturers want us to be more independent to solve the problem. But in Malaysia, when we meet some problems, we can see the lecturer and they will give you example. Once they give us any example, we can do it very well. But without the example, we can't do it. Compared with here, the lecturer will give only one example, but the assignment question is totally different from the question they give. (MM1)

In general, Singaporean Chinese students seemed closer to the Australian mode of thinking and were comfortable with it; The Malaysian Chinese and Hong Kong students, probably due to the influence of their lengthy colonial histories, were also quite happy with Australian education systems.

However, mainland Chinese student interviewees voiced some criticisms of the Australian system. Cognition of the role of teacher was brought into focus. In mainland China, education is widely conceptualised as integrating the cultivation of 'human souls' by providing students with knowledge in which teachers play a crucial role in cultivating the souls. It was a big issue that mainland Chinese students encountered in understanding the role of teachers in Australia. In China, the teacher's role is a knowledge transmitter and moral cultivator, and thus students take the teacher's accessibility to help inside and outside classroom for granted. But in Australia, some mainland Chinese students found that the Australian lecturers were

always in a hurry, not really concerned about their students. They just took a teaching job as one occupation, so they should not be expected to be offer personal caring, as CM3 said:

> *My teacher doesn't really care about me. I can sense that she is no really keen to help me when asking her some questions. Sometimes, she asked me about some personal things, but what I felt was not for caring but for fun.*

To some extent the student might not have recognised the different role of teachers in Australia. In fact, students at tertiary level of Australia are expected to develop and enhance the ability to study and work independently, including time management, and not only managing your own time but also your supervisor's time as described in the Graduate Research Book of University of Tasmania (2005). University students must resolve to explore their capacity to solve problems for themselves, given that teaching styles and personalities of teachers vary a good deal from person to person.

Social influence

Social influence is when the actions or thoughts of individual(s) are changed by other individual(s). Social influence can be described by the word power, which means to possess the ability to influence a person/group of people to obey one's own will. Usually people of good genes (looks), significant sums of money, good jobs and so on will possess social influence on other, "ordinary" people. So even if the person doesn't possess any "real" or political power but possesses the things listed above (good looks, money, etc.), he could persuade other people to do/say something. But in this study, social influence tended to focus on the ways that local Australians as hosts behaved with foreign students. In other words, this thesis examined the acceptance and tolerance that local Australian people showed towards international students here in Hobart, Tasmania.

From the narratives of these student interviewees, it can be seen that an overwhelming majority of Australian people were nice to Asian students including Chinese background students, as MF comments:

> *I mean people here; they tend to talk very politely compared to people in my country. I think they are very friendly.*

However, students found that some locals displayed mixed and standoffish attitudes and even racial discrimination. For example:

> *I got the feeling, to some people, I am a stranger, an Asian look, so they are not that friendly, or they don't want to speak to me, they never even bother to talk with me. (CF1)*

> *At the university, we are treated very equally. But outside the university, some people have different ideas toward Asian people, not only Chinese students. (CM2)*

> *So many Chinese or even Asian people had problems in street sometimes, people spray you water or eggs to you. My friends all have this experience...I think Tasmania here is quite safe, people only do this like pouring water or throw eggs to you, but big cities like Melbourne and Sydney, maybe they will fight you, or hit you. My friend in Sydney, last time, his wallet was stolen by someone and they all hit him and he went to hospital. (MM2)*

> *I heard that my friend said that if you walk to the city or somewhere, some local people ask them politely: 'where are you from?' My friend said 'from Malaysia'. And then 'how you come here?' After you said you travel by airplane like that, they said 'better go to the airport and then go back to your country.' (MM1)*

Generally, under the surface of this courteousness and friendliness, there is a sentiment of superiority, even discrimination in some Australians. Although the Australian government has been promoting multicultural integration policies, some incongruous phenomena still emerge here or there. The establishment of a multicultural society still has a long way to go.

6.5.3National identities

Identity conveys the meaning of being identical. Put as simply as possible, your identity is who you are. In similar fashion, national identity means the characteristics shared by the people of a nation which make them identical. It has long been said that walking in a western street, you can immediately tell at first glance who is a mainland Chinese person, Hong Kong person, Malaysian Chinese and even Singaporean Chinese despite the fact that they are all Chinese ethnics.

In what follows, the national identities of the four groups of Chinese background students were examined through their accounts about themselves and other groups. Firstly mainland Chinese students.

Mainland Chinese students:

By looking at the national identity of mainland Chinese students, two differing and contrasting opinions were easily found among the expressions of the student interviewees. The positive views expressed that mainland Chinese students are studious, hardworking, intelligent, friendly and even high performing learners. The opposite views expressed the opinion that mainland Chinese students are too traditional, outdated, and practical. The positive views were held by mainland Chinese students themselves like CF1 and CF2, who took pride in being mainland Chinese:

> *I think, I very proud of my culture and my identity. I will introduce like I come from Henan where the Shaolin Temple is. Whenever I introduce myself, I will show them that Kung fu originates from my province, my hometown. And I always take every opportunity to show Chinese culture. Most of the people I came across; their concept of China is in the 1980s. I was quite upset. They shouldn't have this kind of impression, because China has changed greatly, completely different from the 1980s. (CF1)*

> *I think Chinese culture is great. Some people are not familiar with Chinese culture, they don't understand Chinese culture...I think Chinese students from mainland are more traditional. For example, I am a very traditional*

Chinese girl. If I choose a boy friend, I want to spend most of my time with him. But the western girls don't think like that. (CF2)

In regards to some criticism against mainland Chinese students, CF1 narrated:

They (Australians) said 'Chinese students are dirty, they don't like to maintain the room clean, they don't like to do washing, clean up the dishes'. I think it differs from individual to individual. But some people have this kind of concept, like they are lazy, they don't maintain, clean up the room. (CF1)

But then she continued her topic:

I think even Australian people, some people, they don't take a shower in the morning, like my friends, they got up and ran immediately to the bus stop and get to the school, they haven't got time to brush their teeth and something. I think it's different in some individuals, not the national identity. (CF1)

When speaking of the negative impacts of Chinese Birth Control policy on the young generation, like dependence and egotism, CF1 argued that:

Maybe a large number of them have this kind of bad habits or bad influences to Australian people, not all of them. They will get better. There are always good things and bad things in terms of birth control policy, like every coin has two sides. We can say that they will be changed in the future. (CF1)

With regards to responses on the impressions of mainland Chinese students from the other three groups of students, although MM2 said that: 'Mainland Chinese students are kind, 'We have so many things in common with mainland Chinese students', the negative views greatly outweighed the positive ones. As responded by HM:

For China, it's still a developing country, their ideas, they can not explore as much as they can, because it's still developing...In Australian teacher's mind, Chinese people are affected by traditional thinking in which their mind won't really want to explore too much western culture. (HM)

SM voiced similar views as HM:

> *In Singapore, even though we want foreign talents, mainland Chinese is viewed as cheap labour. I mean nothing personal. And also when social unrest happens, sometimes in Singapore, mainland Chinese get blames for it. Of course, mainland Chinese have a bit of cultural difference .Like spitting and littery. Singaporean Chinese and mainland Chinese are the same race, we just brought in different places and different cultures. When the Singaporean Chinese compare with mainland Chinese, they feel superior in a way, because they litter less, spit less. So I feel in this way, Singaporeans they do feel mainland Chinese cause kind of social unrest, a bit of deviant group, a group, it's not the mainstream. (SM)*

SM also mentioned that like Hong Kong people, mainland Chinese people are more competitive and less open to ideas of kindness. An opinion from HM was quite related to the concept of knowledge in the mind of mainland Chinese students.

> *Hong Kong is a place which is really need skilful people rather than knowledge. Knowledge doesn't mean anything. But in China, cause' China has a big population, knowledge is very important for career, for life in China. People really need to know more in order to get whatever they want.*

However, these comments from the students were not recognised by mainland Chinese students. To respond to other groups' superiority towards mainland Chinese students, CF1 told me:

> *I think one of the girls is from Singapore. When I first met her, she is kind of think better than me, has this kind of priority. But in fact, I don't think so, I didn't accept it. That's why I always avoid her and I don't want to talk with her. It's not true I think. She told me she had stayed here for five years. But if I had stayed here for five years, I've got my master instead. (CF1)*

CM1 further articulated his understanding of this superiority:

Some Hong Kong students often look down upon mainland Chinese students... Most of them don't like mainland Chinese students, because mainland Chinese students often get top marks and good jobs after graduation. So this is why they don't like mainland Chinese students.

Lastly CM1 added: '*maybe only their English is better than mainland Chinese students.*'

Seen from their accounts, it can be understood that, although some groups of students were felt somewhat superior to mainland Chinese students in terms of the economical and social development of China. Mainland Chinese students did not agree, in fact they were proud of being mainland Chinese and of their good performance in their courses.

Hong Kong students:

Regarding Hong Kong quasi-national identity, Hong Kong students are almost all Chinese ethnics, as the predominant population in Hong Kong are Chinese. The Hong Kong interviewees were very confident of them and claimed that Hong Kong students are more westernised, more competitive and have more innovative knowledge than other groups, and that because of this they should be mentors or instructors for other Chinese background students. Like,

Hong Kong people would make things faster than the other people I think, learn faster. Cause' Hong Kong used to be a British colony, we've got enough English. When we were young, we started to deal with English. When we got to Australia, we should be fine... for Hong Kong people; we think ourselves better than other people in Asian countries. (HM)

When the researcher asked that whether this implied that they were good enough to instruct others, HF responded with '*I think in a way like this.*'

One mainland Chinese interviewee (CM2) also expressed his feelings about Hong Kong students.

I had a good impression of Hong Kong people. Maybe we have the same language, the same background, anything is the same. Most of them are very good.

Another mainland Chinese student gave a totally different point of view about Hong Kong students, in which Hong Kong students were described as unfaithful to China due to the handover of Hong Kong in 1997, and were under-achieving performers. Here are his remarks:

In the first class, my teacher asked where you were from. We all say we came from China, Only one person didn't answer. When the teacher asked her, she said she came from Hong Kong (irritating tone). This is why I don't like some Hong Kong students...She hasn't accepted the relationship between Hong Kong and China. Maybe they think Hong Kong is just Hong Kong, not part of China. (CM1)

From a Singaporean Chinese student's perspective, Hong Kong students are even less kind to people because of their upbringing in the competitive background of Hong Kong.

Hong Kong is even more competitive society and less open to ideas of kindness. I think culture plays a part. With religion in Singapore, a lot of Singaporeans have religion, either Buddhists or Taoists. But in Hong Kong a lot don't have religion. So Hong Kong people have less moral value in a way. (SM)

A Malaysian Chinese student expressed some similar ideas as SM about Hong Kong students:

They quite think themselves better than others. They think they are right, others are wrong. When you are doing something you like, if they don't like, they will tell you what they wonder about, and say that they stay with the right. Hong Kong students think their knowledge is more than you. *(MM2)*

Singaporean Chinese students:

Conceit, self-admiration, and a feel of narcissism permeated every word of the remarks of Singaporean Chinese students. First they felt honoured that English is their first language; second, they thought they were more westernised than other national students and closer to the Australian educational environment.

> *I think Singaporeans are more skilful in languages and I think Singaporeans have advantages over Hong Kong, mainland and Malaysian Chinese...Singaporeans always follow the western model rather than the mainland Chinese mode... I think the closest to the Australian view would be the Singaporean perspective. (SM)*

> *The only difference between local students and international students is the amount that we need to pay attendance fees. That's just about the only difference I see. (SF)*

In fact, the superior attitudes of Singaporean Chinese students were also experienced by this researcher when he once participated in a BBQ party of the Singaporean Student Society. On that occasion, their indifference and unconcern almost overwhelmed me throughout the event.

Nevertheless, SF admitted that traditional Chinese culture still had an influence on the minds of Singaporean people, saying: '*Many mindsets still are not being changed. They are very much Asian mindset back there.*' However, deep down in their minds, Chineseness does not appeal to them any more, and has even become dishonourable and even shameful for some Singaporean Chinese students, which was reflected by what MM2 said: '*some Singaporeans are Chinese Singaporeans, but a lot of them cannot speak, can not read, can not write Chinese.*' The following passage further describes the seriousness of this situation.

> *A lot of Singaporean Chinese don't consider themselves Chinese. They feel the westernised. It's not a good thing to be Chinese basically. You are probably to be Chinese but better to be westernised. (SM)*

HM also mentioned that:

> *I think Singapore people were mainly affected by different European thinking more than traditional thinking, so I think they are weak of traditional ideas of Asia and stuff like that.*

When asked what impressions Singaporean students made on other national students, a Hong Kong student was not sparing in praise of them:

> *From my thinking, I think Singaporean students are very, very good learners. They have very ability to learn new things in a short period of time. And they can present things dramatically well than other people including Hong Kong people, Malaysian Chinese and such. (HF)*

However, MM2 agreed with the comment that Singaporean Chinese students have more sense of competition, but he added '*not all of them*'. And MM1 also expressed similar impressions and explored some reasons:

> *Maybe sometimes, they will think they are better compared to Malaysia. they like to compare how much you get in the exam, if they are not well in some subjects compared to us, to me, they will try to catch up with. I meet one Singaporean student chose some subjects as same as mine, but they think Bachelor of Bi-tech is higher standard compared to Bachelor of Science, and they won't make friends with you. (MM1)*

Malaysian Chinese students:

From the Malaysian Chinese students' own point of view, they are high-performing but squeezed-out students with open-minds and good English. Just as MF, MM1 and MM2 said:

> *Maybe we are open-minded. I heard that my friend said, in mainland China, they learned about the sex topics separately, males go to one class and females go to another. In Malaysia, we teach together. (MM1)*

> *I think Malaysian Chinese are strong in language that every Malaysian can know at least 3 languages and I know five. (MM2)*

From Singaporean Chinese students' perspective, Malaysian Chinese students seem more traditional than them.

> *Because in Malaysia, there is not that much social, cultural assimilation, compared to Singapore. In Malaysia, firstly, they have racist policy, like they got a racist policy that segregates Chinese. So Chinese still have to keep hold of their traditional culture, they can't let it go. (SM)*

In the opinions of a Hong Kong student:

> *For Malaysian Chinese, I think they are quite similar to Hong Kong students. In a way they are in the middle of some Chinese traditional thinking and western impact. (HM)*

This was voiced differently by a Mainland Chinese student 'Maybe the Malaysian Chinese students are more traditional than mainland Chinese. They are good, friendly' (CM2)

Comparison of these national identities:

Based on their self accounts, the students' profiles of national identity were established by comparing their own with other national students.

Mainland Chinese students are friendly to others (MM2 and MF), and sometimes slightly practical (MM1). They are more traditional compared to the other national students (MM1, HM and HF). Mainland Chinese students like grouping themselves due to language issues and because Chinese are viewed as cheap labour in Singapore and have some habits like spitting and littering this leads to some superiority in Singaporean Chinese students (SM and SF). However, mainland Chinese students themselves believed that they were the best students among all these groups (CM1, 2, 3 and CF1, 2).

Hong Kong students believed that they were more westernised and knowledgeable enough to be able to lecture the other groups of students, and this was evidenced by mainland Chinese students and Malaysian Chinese students, and aroused some disgust among them. Mainland Chinese students were also quite annoyed with their reluctance or unwillingness to accept the Chinese political identity. Notwithstanding,

some still displayed a tendency to be friends with mainland Chinese students in an Australian university (HM):

> *Yes, I feel comfortable to hang around with Chinese friends other than Malaysian or Singaporean friends. Cause' I think Malaysian and Singaporean people really like to group them. They don't like to allow some Chinese people to join. I think they only like Malaysians and Singaporeans; they just really like each other. (HM)*

In the comparison of these four groups of students, Singaporean Chinese students had the point of view that Singaporean Chinese students were unarguably better:

> *I think they think they are better than mainland Chinese students, possibly also Malaysian Chinese. But comparing Hong Kong and Singapore, I think it's very obvious, when a Hong Kong person and a Singaporean person meet, they can see how much the advantage that a Singaporean person has, because of their English language. They will view as competition rather than superiority. I think Singaporean students only feel superior towards mainland Chinese students. If I have to grade of quality of students, from Singaporean perspective, I say the number 1 will be Hong Kong, the number 2 will be Malaysia and the number 3 will be mainland China. I think it kind of makes sense. (SM)*

6.6 Conclusion

One of the greatest advantages for qualitative research interview is to discover underlying meanings, patterns and themes in the responses and behaviours of interviewees. The analysis in NVIVO was made in the qualitative research interview by theorising the process of open coding, writing memos, axial coding, and modelling. The use of the NVIVO software was proved helpful. By following up the ideas and probing the motives and feelings of the four groups of Chinese background students, some emergent themes were summed up as follows:

In respect to approaches to learning: Beginning with learning strategies, Hong Kong students most preferred Memorisation Strategies with a view to seeing memorising as a pathway to better understanding. This is quite in accord with some prior researchers' outcomes (J. B. Biggs, 1991; Lee, 1996; Marton et al., 1996; D. A. Watkins & Biggs, 2001). Mainland Chinese students especially emphasised understanding in the learning process; Singaporean Chinese students had a strong desire to use Elaboration Strategies and Malaysian Chinese students often used Control Strategies. Motivation, job prospects and interest were two major factors for Singaporean Chinese students and Hong Kong students; interest and migration were the two factors for Malaysian Chinese students; while instrumental motivation such as migration outweighed the factor of interest for mainland Chinese students. Lastly, all these four groups of students displayed strong self-related beliefs in undertaking their courses and there were no big differences in the issue of learning preference.

In regards to linguistic, educational and social influences: through careful investigation, it was found that the degree of English proficiency did play a big role in what relationships could be built up with teachers in Australian tertiary education. This accords with the findings of Oxford (2001)and Nunan (2003). The outcomes of such relationships would, of course, in turn affect the approaches to learning used by these students. It was disclosed that some Australian teachers overlooked the presence of Chinese background students with inadequate English, especially from mainland China and even Malaysia. On account of the differing roles of teachers in Australia and Asian countries, students, especially from mainland China, were sometimes confused with the roles of teachers as knowledge transmitter and moral cultivator that is widely recognised in their own country, and which has been pointed out by Hui (2005). On this point, Singaporean education is quite close to Australian education. And it was also found that the vast majority of Australians were nice to Asian students including Chinese background students. They seemed not to bother where these students were from and which group should be better than another.

In respect of national identities: Singaporean Chinese students thought they should be listed No. 1, if ranking were to take place among these four groups, due to their English skills. Hong Kong students thought they were more westernised and able to lecture others. Mainland Chinese students were viewed as both traditional and

practical, and also friendly to others. Malaysian Chinese students are high-performing but squeezed-out students with open-minds and good English. Both mainland Chinese students and Singaporean Chinese students were found being proud of part of their countries, while Hong Kong students were reluctant to admit that they are Chinese.

Chapter 7

National Identities in Australian Government Documentation

7.1 Introduction

Identity refers to the psychological status of being who or what a person or thing is. National identity is thus the fact of being a national of a particular country. This characteristic represents the identity of person belonging to or originating from a nation. In Chapter 6, in analysing the qualitative data of interviews with Chinese background students, we have discovered some differences of national identities that the four groups of Chinese background students perceived of themselves and each other. This chapter has a different focus: the Australian government's perception of Chinese background students from different regions in terms of its assumptions and presuppositions about these students. The discussion in this chapter is based on the theoretical framework of Fairclough comprehensively presented in his two well-known books *Analysing Discourse* (2003) and *Critical Discourse Analysis* (Fairclough, 1995). It examines issues which are common targets of Critical Discourse Analysis such as power, bias, generalisation, and inequity.

The chapter focuses on how bias is manifested in discourse by examining and identifying national identities of overseas students from mainland China, Hong Kong, Singapore and Malaysia in an official document of Australia. I present how the discourse in the DIMIA document regarding assessment levels of financial proof in student visa processing can be used as an instrument to exert ideological dominance in the recruitment of overseas students. I also examine how this policy is embedded in the larger, but less transparent structure of power discourse that disguises dominance in naturalised discourse.

7.2 Background

Australia was an early player in the education export industry. Today it is the largest provider per head of population, and the third largest English-speaking provider of international education services, with seven per cent of the market, behind the USA (32 per cent) and the UK (15 per cent).The industry is now Australia's third largest service export industry (Kenyon & Koshy, 2003).

Through the past two decades, increasing numbers of overseas students have come to Australia. In 2002, there were 273,552 international students enrolled in Australia, but in 2005 the figure had increased to 344,815 growing almost 8% per year (AEI-International Education Network, 2005). In 2005, 9 of the top 10 source countries were in Asia accounting for 68.8% of the total overseas students, in which the students from mainland China, Hong Kong, Malaysia and Singapore represented 38.2%. Traditionally, these students are considered the main source of Chinese background students. More surprisingly, among these 10 countries, the number of mainland Chinese students rocketed. In 2002, China first surpassed Malaysia in student numbers studying in the Australian tertiary education system (AVCC, 2005) and became the biggest export country of the Australian education sector. In 2004-2005, the number of China's students grew by 17.8% (AEI-International Education Network, 2005), with almost 10% above the average. The foregoing data also show that the increasing trend in numbers of overseas Chinese students still remains strong. To sum up, exporting education of Australia has forged active links with other countries, especially mainland China, Hong Kong, Malaysia and Singapore, from which over one third of overseas students originate.

By accepting increasing numbers of overseas students, Australia has become more widely recognised in the arena of international education, and is regarded as a safe, friendly study destination with high quality courses as stated by Alexander Downer, Minister for Foreign Affairs said (2005). However, there are still some latent superior sentiments and attitudes resonating with bias beneath the surface of this "friendly study destination".

The aim of this chapter is to show how discursive strategies expressed in this commonwealth government policy operate to produce inequalities, so as to help us better understand how prejudice concerning student national identities is woven into

the words of this policy in Australia. DIMIA is the main policy-maker and policy-enforcer in the field of migration and education exports in Australia, i.e. it plays a key function in dealing with multicultural issues in the domestic and international arena. Therefore, in this sense, this document chosen from DIMIA has much more significance or persuasiveness than otherwise. Before the discursive strategies are dealt with, it is necessary to briefly introduce a general characterisation of Australian education export discourse.

In the last 20 years, trans-national education has become a global phenomenon, fuelled by many forces. These include the globalisation of trade and communications, internationalisation of labour markets, declines in the costs of international travel and communications, and growth in the numbers who can afford to obtain better educational opportunities than previous generations. Governments are more actively promoting the international mobility of students and teachers for a mix of cultural, political, labour market and trade reasons. International education became part of Australia's geo-political positioning after World War II (Poole, 2004). Today's Australian education export industry owes its genesis to the Australian Government's initiative in 1986 to open Australian education to full-fee paying overseas students (AEI-International Education Network, 2005).

7.3 General characterisation of financial proof for overseas student visa applicants

With respect to the recruitment of full-fee paying overseas students, DIMIA set up a serial of policies to ensure that all overseas student visa applicants have sufficient financial capacity to study and live while in Australia. Such regulations are formulated for overseas student visa applicants as follows:

- *You will need to show that you have enough money to pay for living expenses, education costs and travel for the duration of the course.*
- *You will need to show that you have enough money for you, your spouse and all of your children aged under 18 years, whether or not they will be coming to Australia with you.*

Your visa subclass and assessment level determines how you will need to prove your capacity to meet your financial requirements. (DIMIA, 2005)

These descriptions reveal that overseas student visa applicants not only need to show that they can afford their living, education and travel costs but also those of their dependent family members, whether or not they will be coming to Australia. More importantly how much funding they need depends on their visa subclass and assessment level. Before presenting this key part of the chapter, i.e. assessment levels, it is necessary to let us first look at what visa subclasses are (see Table 37):

Table 37: Student Visa Subclasses

If the main course you will be studying is a(n)...	***Then you can apply for a Student visa, subclass...***
• *English Language Intensive Courses for Overseas Students (ELICOS), undertaken as a stand-alone course, not leading to an Australian award* *or* • *ELICOS undertaken as a stand-alone course, leading to a certificate I, II, III or IV,*	*... 570 - Independent ELICOS*
• *primary school course* • *secondary school course, including junior and senior secondary* *or* • *approved secondary exchange program,*	*... 571 - Schools*
• *certificate I, II, III, and IV (except ELICOS)* • *diploma* • *advanced diploma* • *vocational graduate certificate* *or* • *vocational graduate diploma.* ***Note:*** *Former RATE system qualifications: Certificate, Advanced certificate and Associate diploma,*	*... 572 - Vocational Education and Training*
• *bachelor degree* • *associate degree* • *graduate certificate* • *graduate diploma* *or* • *masters coursework,*	*... 573 - Higher Education*
• *masters research* *or* • *doctoral degree*	*... 574 - Postgraduate Research*

• *enabling course: non-award foundation studies* *or* • *other full-time course or components of courses not leading to an Australian award,*	*... 575 - Non-award*
• *full-time courses of any type undertaken by an AusAID or Defence student sponsored by the Australian Government,*	*... 576 - AusAID*

(DIMIA, 2005)

By examining the form, we can see there are seven visa subclasses, in which, generally speaking, Subclass 570 concerns language learning, Subclass 571 refers to primary and secondary schooling, Subclass 572 to TAFE, Subclass 573 to coursework degrees and Subclass 574 to research degrees, Subclass 575 is non-award courses and Subclass 576 can be any type, but it is hard to get sponsorship from the Australian Government. And from the data provided by Overview – Australia's Student Visa Program of DIMIA (2005), we can understand that a predominant majority of overseas students come from Subclass 572, 573, 574. Conspicuously, DIMIA also set up four assessment levels by countries as a way to determine what materials student visa applicants need to provide in order to meet the relative financial requirements according to their visa subclasses. Table 38 describes what financial requirements correspond to assessment levels in student visa assessment.

Table 38: Financial Requirements of the Assessment Levels

If your assessment level is ...	***Then you will need to ...***
1,	• *... declare that you have access to enough money to meet the minimum financial requirements in the Student visa application form*
2,	• ***show*** *that you have access to the minimum financial requirements for the first* ***12 months*** *of your stay in Australia* • ***declare*** *that you have access to the minimum financial requirements for the remainder of your stay in Australia.* *Note: Although* ***non-cash assets are not directly acceptable****, it is possible to either:* • *liquidate the assets prior to applying for a student visa, depositing the money you receive in a bank*

	or • *use the assets as collateral for a loan from a financial institution*
3,	• ***show*** *that you have access to the minimum financial requirements from an acceptable source for the first* ***24 months*** *of your stay in Australia* • ***declare*** *that you have access to the minimum financial requirements for the remainder of your stay in Australia* ***Exception:*** *If you are applying for a subclass 574 (Postgraduate Research sector) visa, you will need to* ***show*** *that you have access to the minimum financial requirements from an acceptable source for:* • ***at least*** *the period of any preliminary course* ***and*** • *the first* ***12 months*** *of your principal course*
4,	• ***show*** *that you have access to the minimum financial requirements from an acceptable source for the first* ***36 months*** *of your stay in Australia* • ***declare*** *that you have access to the minimum financial requirements for the remainder of your stay in Australia* ***Exception:*** *If you are applying for a subclass 574 (Postgraduate Research sector) visa, you will need to* ***show*** *that you have access to the minimum financial requirements from an acceptable course for:* • ***at least*** *the period of any preliminary course* • *the first* ***12 months*** *of your principal course*

(DIMIA, 2005)

What basis these assessment levels were grounded on remains unstated or unexplained in the DIMIA documents. Nevertheless, what can be easily perceived is that:

- The countries at Level 3 in most subclasses (a total of 29) are comprised of: Bangladesh, Bhutan, Burma, Cuba, Ecuador, Fiji, Ghana, India, Iran, Jordan, Kenya, Kiribati, Laos, Maldives, Mongolia, Nauru, Nepal, Nigeria, Philippines, Russian Federation, Samoa Western, Solomon Islands, Sri Lanka, Tanzania, Turkey, Tuvalu, Vietnam, Zambia and Zimbabwe
- The countries at Level 4 in most subclasses (a total of 4) are: Cambodia, China (excl. SARs and Taiwan), Lebanon and Pakistan

The geographic distribution of these countries is as follows:

- 24 Asian countries: Cambodia, China (excl. SARs and Taiwan), Lebanon, Pakistan (all Level 4 countries are Asian), Bangladesh, Bhutan, Burma, Fiji, India, Iran, Jordan, Kiribati, Laos, Maldives, Mongolia, Nauru, Nepal, Philippines, Samoa Western, Solomon Islands, Sri Lanka, Turkey, Tuvalu, Vietnam.
- 6 African countries: Ghana, Kenya, Nigeria, Tanzania, Zambia, Zimbabwe
- 2 Latin American countries: Cuba, Ecuador
- 1 European: Russian Federation

The ongoing data display that a majority of countries at Level 3 and 4 are in Asia. Ironically, 'Asia is Australia's most important regional market for education exports, and will continue to provide unprecedented opportunities for Australia, as Asian incomes grow and higher education takes on increasing prominence.' said Dr Brendan Nelson (2005), Minister of the DIMIA. He then continued 'In terms of international student spending, Australia's top eight markets measured on fees are in Asia. China is Australia's largest source of foreign students with almost 70,000 students enrolled in Australian institutions in 2004'.

For assessment levels of the four countries researched in this study, mainland China is place on Level 4 in all visa subclasses; Hong Kong is set on Level 2 in three visa subclasses and on Level 1 in the remaining three visa subclasses; Malaysia and Singapore are all positioned at Level 1 in all visa subclasses. Needless to say, students from China and Hong Kong are all Chinese. Malaysian-Chinese ethnicity represents about 40% of the total population of Malaysia (Smith, 2001). In addition, for many years, the Malaysian government has been using privilege policies in education to non-Chinese ethnic students in order to create equal development of all Malaysian ethnics. As a result, Chinese ethnic students in Malaysia are more likely to pursue education overseas. Although it is hard to obtain an accurate percentage of Chinese ethnic students within the Malaysian student group in Australia, it is well known that more than half of Malaysian students are Chinese. Within the population of Singapore, Chinese predominate, making up more than three-fourths of the total (mid-year 2004 Chinese accounted for 76%) (Britannica Online, 2006b). Therefore, it could easily be conjectured that at least half of overseas Singaporean students are

Chinese. However, as seen from the assessment level policies of Australia, although these Chinese background students are all of Chinese origin, they are categorised into different assessment levels by nation. The detailed table about their assessment situations is presented in Table 39 below:

Table 39: Student Visa Processing—Assessment Levels

Passport held	570 ELICOS	571 Schools	572 VET	573 Higher Education	574 Postgraduate Research	575 non Award
China (excl. SARs and Taiwan)	4	4	4	4	4	4
Hong Kong SAR	2	2	1	1	1	2
Malaysia	1	1	1	1	1	1
Singapore	1	1	1	1	1	1

Excerpted from Form 1219i for Overseas Student Program-Assessment Levels (DIMIA, 2005a)

In terms of the students from these countries, an additional requirement is made of them with regard to acceptable financial sources. The following table (Table 40) describes acceptable sources for funding if their assessment levels are 3 or 4.

Table 40: Acceptable Sources for Funding for Level 3 and 4

Assessment level	***The funds to support you and your family members can come from ...***
3	• *a money deposit with a financial institution held by you or an individual providing support to you for at least 3 consecutive months immediately before the date of your visa application* • *a loan from a financial institution made to you or an individual providing support to you* • *a loan from the government of your home country* • *your proposed education provider* • *the Commonwealth of Australia or an Australian State or Territory government* • *the government of a foreign country* • *a provincial or state government of a foreign country that has the written support of the national government of the foreign country* • *a corporation* • *an organisation gazetted by the Minister* • *an acceptable non-profit organisation* • *a multilateral agency.* ***Examples:*** *United Nations, World Bank or Asian Development Bank.*
4	• *a money deposit with a financial institution that has been held for at least 6 consecutive months immediately before the date of your visa application by:* o *you*

	○ *your spouse* ○ *your brother or sister* ○ *your parents* ○ *your grandparents* ○ *your aunt or uncle (only if they are usually resident in Australia and either a citizen/permanent resident of Australia or an eligible New Zealand citizen).* • *a loan from a financial institution made to (and in the name of):* ○ *you* ○ *your spouse* ○ *your brother or sister* ○ *your parents* ○ *your grandparents* ○ *your aunt or uncle (only if they are usually resident in Australia and either a citizen/permanent resident of Australia or an eligible New Zealand citizen).* • *a loan from the government of your home country* • *your proposed education provider* • *the Commonwealth of Australia or an Australian State or Territory government* • *the government of a foreign country* • *a provincial or state government of a foreign country that has the written support of the national government of the foreign country* • *a corporation* • *an organisation gazetted by the Minister* • *an acceptable non-profit organisation* • *a multilateral agency.* ***Examples:*** *United Nations, World Bank or Asian Development Bank*

7.4 Theoretical framework

Now, it is necessary to lay down the theoretical framework within which the entire analysis is undertaken. This study adheres to Critical Discourse Analysis (CDA) employed by Van Dijk (1993; 1996)and Fairclough (1992; 1995), who point out CDA has been influential beyond the area of discourse as 'an explanation of how and why particular discourses are produced. Discourse is not only a product or reflection of social processes, but seen to contribute towards the production (or reproduction) of these processes' (Teo, 2000). Gramsci (1971) and Althusser (1971)have both stressed the significance of ideology for modern societies to sustain and reinforce their social structures and relations. 'As a pre-eminent manifestation of this socially constitutive ideology, language becomes the primary instrument through which ideology is transmitted, enacted and reproduced' (Foucault, 1972). Teo (2000) then states: 'thus, by analysing the linguistic structures and discourse strategies in the light of their interactional and wider social contexts, we can unlock the ideologies and

recover the social meanings expressed in discourse'. Van Dijk (1993; 1996)and Fairclough (1992; 1995)share a common vision of the centrality of language as a means of social construction, and they embark upon various investigatory studies designed to unmask and make transparent the kind of socio-political or socio-cultural ideologies that have become entrenched and naturalised over time in discourse.

7.5 Data analysis

The analysis of this policy discourse is undertaken in two parts. Some words within this policy are first sketched using linguistic analysis, with a focus on particular discursive strategies that have the potential to harbour ideological meaning. Following this, a comparative analysis based on relative policies in other western countries is undertaken. In so doing, I hope to gradually reveal the construction of a prejudicial ideology embedded within its words.

From a linguistic perspective, we find that on Level 1 in Table 2 there is no requirement for financial proof, just to 'declare'. However, on Level 2, it changes into '**show** that you have access to the minimum financial requirements for the first **12 months** of your stay in Australia', which is written in block letters. And then on Level 3 it shifts to '**show**... and **24 months**' and on Level 4 '**show**... and **36 months**' both of which are written in block letters. The increasing months can only give one interpretation, i.e. of decreasing credibleness or sense of trust towards these overseas student visa applicants. Another difference also appears between Level 2 and Level 3 and 4. At Level 2, the requirement is only to '**show** that you have access to the minimum financial requirements for the first **12 months** of your stay in Australia', but at Level 3 and 4, 'an acceptable source' is added to it. That phrase implies some financial sources are not accepted or 'we' do not trust other sources in the countries on Level 3 and 4. What is more, between Level 3 and Level 4 in Table 4, in the delimitation of 'an acceptable source', there are two disparities. One is that on Level 3 one item states 'a money deposit with a financial institution held by **an individual** providing support to ...', while on Level 4 it changes into 'a money deposit with a financial institution that has been held ...by **you/your spouse/your brother or sister/your parents/your grandparents/your aunt or uncle (only if they are usually resident in Australia and either a citizen/permanent resident of Australia or an eligible New Zealand citizen)**' which means DIMIA only trusts

people listed above as financial supply sources. The other one appears on Level 3, a money deposit is required for at least '3 consecutive months immediately before the date of your visa application', but on Level 4, the corresponding requirement changes to 'at least 6 consecutive months'. The discourse expressed in these expressions reveals that the degree of credibleness is set up in a decreasing order along the four assessment levels.

What caused DIMIA to take such an action to ensure the adequate financial capacity of those overseas students? And what discursive strategy is used in the discourse of this DIMIA policy? Although the reasons remain undeclared in the DIMIA documents, it is not hard to work out some reasons. For example, some students from Hong Kong on Level 2, especially from China on Level 4 might falsify their application documents which leads to a decrease in their credibleness. However when deeper thought is given, we might find this issue more likely concerns the educational levels of visa applicants, rather than their financial capacity. As most financial proof such as money deposits are very hard to replicate or falsify and these are also very easy to identify by a phone call to their corresponding financial institutions. In this sense, it seems not sufficient to justify this policy by the reason of document falsification. Or worse, that might suggest that the Australian Government is more commercially oriented in the recruitment of international students. The second easily identified reason is to prevent illegal migration from mainland China and Hong Kong. That sounds rather reasonable, but when we look closely back to the visa subclasses, it is easy to note that one of the DIMIA minimum requirements for Master or Doctorate candidate applicants is a Bachelor degree gained with efforts of as long as three or four years. Undoubtedly illegal residence in Australia costs too much and is more harmful than beneficial for undergraduate students. They are often only around 17 or 18 years old and too young to risk their whole lives in a totally different country. For TAFE students, English mastery is an unsurmountable task; as a matter of fact, IELTS (the International English Language Testing System) is extremely difficult and often an unachievable task for people in mainland China who intend to remain in Australia. The last reason for this policy could be to prevent overseas students from mainland China and Hong Kong participating in too much part-time works in case their working activities will have a negative impact on domestic labour markets, and also negatively affect their own full-time study even if

in a noble cause. But that reason is also groundless, as far as the researcher knows few overseas students are not engaged in casual work after starting their courses, but it is also clear that no matter how hard they work, they cannot make enough money to cover their tuition fees. Working is more likely a life experience. Since Australia has recruited fee-paying students for around 20 years students should be aware of this before applying for student visas, in that if they can not afford their course fees, they are likely be in big trouble after they commence their courses.

It can easily be perceived that the policy is based on the assumption that the Australian Government is worried that people from Hong Kong, especially mainland China may falsely enter Australia and remain illegally. This assumption is based on a preconception that some students from mainland China and Hong Kong provided falsified documents when applying for student visas, so DIMIA generalised this small group of people to their whole nation and region presuming that all people from there have the disposition for falsifying documents and dishonesty. In Teo's point of view (2000) and in discursive strategy, DIMIA blames these peoples' circumstances on their own faults, thus naturally they deserve this strict policy. However, one result which cannot be neglected is that new applicants from these countries have to take the responsibility for the bad influence from their prior compatriots, although they have done nothing wrong. One example might give a clearer elaboration, such as in a family where all the four children have been raised by the same parents and within the same family environment, if one child broke a vase and ran away, no one would agree that the parents should punish the other three. The problem occurring in the discourse of this policy might be they are not in the same 'family', although they all live on the earth.

Compared with other western countries such as the United States, the United Kingdom, New Zealand, Canada, France and Spain, we can see their policies on financial proof in Table 5, financial policies are also very strict and specific such as income tax documents, original bank books and/or statements, business registration, licenses and payslips etc. just like Australian policies,. However they do not identify different assessment levels by countries like Australia, all the overseas students are governed by the same requirements no matter how strict they are. See Table 41 below:

Table 41: Policies of financial proof in six western countries: the United States; the United Kingdom; Canada; New Zealand; France, and Spain

Country	Policy of Financial Proof
USA	*Financial evidence that shows you or your parents who are sponsoring you have sufficient funds to cover your tuition and living expenses during the period of your intended study. For example, if you or your sponsor is a salaried employee, please bring income tax documents and original bank books and/or statements. If you or your sponsor own a business, please bring business registration, licenses, etc., and tax documents, as well as original bank books and/or statements* *(from US Department of State, November 2004)*
UK	*Bank statements, payslips or other evidence to show that you can pay for your stay and your course of studies in the UK...* *(http://www.ukvisas.gov.uk/servlet/Front?pagename=OpenMarket/Xcelerate/ShowPage&c=Page&cid=1018721067373,09/09/05)*
Canada	*Proof of funds available to support yourself and family members during your stay and to enable you to leave Canada, such as a bank statement, pay stubs, proof of employment or proof of travellers' cheques.* *(http://www.cic.gc.ca/english/applications/guides/5256E2.html2005-09-01)*
New Zealand	*Evidence of sufficient funds to support yourself for the period you will be studying (If you are studying in New Zealand for less than 36 weeks please provide evidence of NZ$1000 per month. If you are intending to study in New Zealand for more than 36 weeks please provide evidence of NZ$10,000 per year as well as sufficient founds to purchase an outward ticket); AND a guarantee of accommodation.* *(Application to Study in New Zealand, September 2005)*
France	*Each French embassy sets the level of financial resources to be demonstrated by prospective students from that country. The amount is on the order of 3,000 francs for each month to be spent in France.* *Students receiving scholarship grants must produce a statement indicating the amount and duration of their grant on the letterhead of the granting organization.* *If the required resources are guaranteed by an individual residing in France the student must produce a signed statement of financial responsibility, a photocopy of the national identity card of the guarantor, and proof of the guarantor's own financial resources (such as the guarantor's three most recent pay stubs and most recent tax return).* *If the resources come from abroad, the student must demonstrate that a bank account has been opened into which the necessary funds will be deposited and produce a promise of payment, translated into French and bearing the authenticated signature of the individual responsible for making the payments, or a statement of payment of funds from the authorities of the student's country of origin.* *(www.frenchculture.org/education/france/go/visa.html,24/10/05)*
Spain	*Letter from the study abroad program assuming full financial responsibility for tuition, room and board for the student during his stay in Spain. For many*

	students this information is included on the previously mentioned letter of acceptance. *Proof of having received financial aid or scholarship covering expenses for tuition, room, board, and personal expenses during the stay in Spain (minimum of $350 per month).* *Notarized letter from parents assuming full financial responsibility for the student for at least $500 per month of stay in Spain.* *(http://www.spainemb.org/ingles/consulate/Student.htm, 24/10/05)*

7.6 Responses from Chinese backgrounds students concerned

As clients, what do the Chinese background students concerned think about this policy? Their responses would reflect the concept of fairness or impartiality on this issue in their own eyes within different national backgrounds. With this question, four students separately from Hong Kong, Singapore, Malaysia and mainland China were randomly chosen from the University of Tasmania for interview in May 2006. A Hong Kong student gave an analytical explanation about this policy:

> *I think it's hierarchy thinking of Australian people. They think Malaysia and Singapore are developed countries. So they think people there would have enough fund to support their study. I think it comes from political idea. I think Australian people put China at pretty low class, cause' it's still developing. The country is under developing, we couldn't really give too much trust on students to come here, compared with Malaysian and Singaporean people. They are developed countries they were quite influenced by western culture. So they get familiar with Australian culture as well. So they just put them in a higher class compared with China and Hong Kong. That's what I think, that's why immigration requirements set to be like this.*

A Singaporean Chinese student said that it worked for the moment but needed a change in future.

> *I think at the moment that's the way to go. I think Singapore is now developed country status. I think it should change in the future, but I don't*

think it's fair, but for the moment, it works. But I think in the future, I don't think you said Hong Kong, as China progresses that policy should and must change. (SM)

A Malaysian Chinese student thought it had its reason was:

Maybe mainland China is too many people, and more taken care of. Some people are cheater or whatever.

While, a Mainland Chinese student was strongly critical of this policy:

It's unfair to mainland Chinese students. Although some students did some cheating in visa applications, others shouldn't take the blame for this. On top of that, with economic development of China, more and more good learning-performed students will be going to Australia for tertiary education and the structure of overseas Chinese students will then be changed. If the policy continues, it must increase the degree of difficulty for them to succeed for visa application.

7.7 Discussion and conclusion

The foregone analysis aims to provide a broad overview of discursive strategies that the policy-maker can and does exploit, whether consciously or sub-consciously, to develop a particular ideology. Now we are going to see how discursive strategies like generalisation can be used to create a reality that generates and reinforces the negative stereotyping of national identity.

'Generalization refers to the extension of the characteristics or activities of a specific and specifiable group of people to a much more general and open-ended set' (Teo, 2000). Most significantly, categorising someone into a particular social schema also tends to colour the perception of the meaning of what that person does. Thus a child taking an eraser from another may be seen as aggressive if he is black but assertive if he is white (Sagar & Schofield, 1980). Similarly, if a student from Singapore or Malaysia is found providing falsified documents this may be perceived as an individual case, but a mainland Chinese student performing the same action may

likely be ascribed to a nation's tendency. That is based on the preconception of much more such cases happening to mainland Chinese students, with disregard to a much larger mainland Chinese student base in Australia, the individuality of mainland Chinese students and even prospective change of these students source.

Given the analysis above, the conclusion could be reached that the way in which the DIMIA policy is stipulated and carried out not only reflects but reinforces the kind of social schemata that overseas students from Hong Kong, in particular, mainland China are less honest, less trustworthy, and need to have more restrictive policies placed on them. In a naturalised way, these students are gradually distanced from the mainstream society, which is exactly the symptom of national bias with which this chapter is concerned.

'A critique of discourse inevitably becomes a political critique of those responsible for the perpetuation of dominance and hence social inequality' (Dijk, 1993). It is hoped that this critical analysis of the official document contributes to the field of CDA and stimulates further research to be undertaken in all areas that harbour ideological persuasion, in order to make transparent the processes that enter into the construction of social inequality and injustice.

Chapter 8

Conclusion

8.1 Introduction

My detective work is just about over and the verdict on my investigation will soon be concluded. As a beginner researcher, initially I felt that the process of undertaking a PhD was just like a tedious and insurmountable climb. However, now, almost standing on its luminous summits, I am so amazed with the beautiful perspective spreading out in front of me. The literature review helped me develop a rigorous and scientific approach to problem solving. Quantitative and qualitative methodologies are also notions that never stay far away from me. This research training provided a fantastic opportunity to savour the joy of research engagement. Now let me share with you my experiences in undertaking the PhD study.

Bearing in mind the research aims, objectives and research questions, I first reviewed the literature of approaches to learning used by the four groups of Chinese background students, i.e. mainland China, Hong Kong, Malaysia and Singapore and their national identities. Then I reflected on their national backgrounds to examine the likely basis of their differences in approaches to learning and national identities. After that, I selected the triangulation research methodology by discussing advantages and disadvantages of each related research method. Following that, the analysis of the quantitative data from the questionnaire and the qualitative data from the interview were separately made to investigate the students' approaches to learning and national identities, the analysis of national identities perceived by the Australian Government was singled out for special focus. Finally it is time to check out what has been identified in this research.

The chapter was designed using the following framework: Firstly, the relative findings on approaches to learning and national identities were presented in relation to each research question and its relevant research objective. Then some implications of these aspects were explored with regard to Chinese background students and their teachers in Australian tertiary education. And lastly limitations were discussed and offered for further research.

8.2 Conclusion about each research question

Prior to sharing the products of this research, it is necessary firstly to review the basis on which these findings are grounded. As indicated in the literature review, the issue of approaches to learning used by Chinese background students had been investigated by a good number of researchers (Biggs, 1994; Biggs & Moore, 1993; Chalmers & Volet, 1997; Chan, 1994; Jones et al., 2004; Laurillard, 1978; Marton et al., 1993; Marton & Saljo, 1976; Smith, 1995) using the framework of Biggs' SPQ (Study Process Questionnaire) with a focus on surface approaches, deep approaches or achievement learning strategies. The OECD model (OECD, 2003) which has been adopted by 26 countries including four non-OECD countries since 2000, is for the first time, extended to Chinese background students in this study. Instead of looking into surface and deep approaches, the OECD model focuses on learning strategies, motivation, self-related beliefs and learning preferences.

Apart from differences in research measurements, the research aim in this study is also different from prior research which focused on learning approaches of Chinese ethnic students from one or more nations/region by taking them as a homogeneous group, except a study by Smith (2001). Whereas, this research explores the differences in approaches to learning used by the four groups of Chinese background students from mainland China, Hong Kong, Malaysian and Singapore. Strictly speaking, this is a comparative study in education. It is only Smith (2001) who carried out a similar comparative study on Chinese background students but he failed to incorporate the largest group of Chinese background students – mainland Chinese students in his target groups, and his research was conducted within the SPQ measurements rather than the OECD model. Therefore, this is the first research that

extended the OECD model to Chinese background students and also expanded the scope of research by firstly having mainland Chinese students involved.

As parts of approaches to learning, motivation and self-related belief of students are also attributed to their national identities. Thus, it is the researcher's belief that exploring the national identities of these Chinese background students will help draw a richer and multi-perspective picture of these students' approaches to learning. A review of the literature of the national identities of Chinese background students shows that there were only two relevant studies conducted by Back (2001; 2002b). But those papers dealt with Confucian heritage culture, and did not differentiate between national identities of Chinese background students within Confucian heritage culture. The second research aim of this study is to explore the national identities of Chinese background students to help understand their approaches to learning and also to fill knowledge gap on that issue.

Chinese background students have long been regarded as rote-learners in practice, although many researchers (Biggs & Watkins, 1996; Chalmers & Volet, 1997; Marton et al., 1993; Marton et al., 1996; Tang & Biggs, 1996; Watkins, 1996)disproved this in their studies. A side effect of exploring approaches to learning used by these students would further provide evidence on whether they are rote-learners. This makes up the third research aim.

8.2.1 Findings in relation to approaches to learning

The function of triangulation methodology is to make full use of the advantages of both quantitative and qualitative methods in order to maximise the research reliability and validity. In this study, the quantitative data analysis provided a general view of approaches to learning, while the qualitative data analysis then enriched it by discovering some underlying meanings in the students' responses and behaviours. The findings arising from both data analyses were presented in relation to the research questions and research objectives discussed above.

For Research Question 1: What are the generic situations of different Chinese background students' (mainland Chinese, Chinese Malaysian, Chinese Singaporean,

Hong Kong Chinese) learning approaches in Australian tertiary education, with regards to learning strategies, motivation, self-related belief, and learning preferences? In other words, how do the discourse of motivation, self-related belief, learning strategies, and learning preferences construct and affect these different Chinese nationals? The answer was discovered through data analysis that overall the Chinese background students involved in this research had positive approaches to learning, which means that their learning strategies, motivation, self-related belief, and learning preferences all presented as positive. However, among their positive approaches to learning, Hong Kong students tended to display stronger attitudes in using approaches to learning. By looking at the four specific components of approaches to learning used by Chinese background students, it was identified that there were still some slight differences among these groups, especially Malaysian Chinese students who were the only group whose academic self-concept showed a negative status.

When looking at specific components of approaches to learning, it was identified that, in terms of learning strategies, no manifest differences were identified in memorisation strategies, organisation strategies, affective strategies and control strategies among these groups by the quantitative analysis. In particular, all the participating groups of Chinese background students showed a very strong intention to use control strategies, while 'controlling one's learning has the closest relationship with performance (OECD, 2003, p. 72)'. However, elaboration strategies appeared to be used much more by Singaporean Chinese students than by other groups. This finding is also reaffirmed by the qualitative analysis in this study. With regards to motivation, although there were no manifest differences identified in instrumental motivation and interest in reading through the quantitative data analysis, the qualitative data analysis indicated that Chinese background students showed a very much stronger preference for instrumental motivation such as migration rather than interest in reading. Conversely Singaporean Chinese students and Hong Kong students showed a stronger interest in reading than instrumental motivation, while Malaysian Chinese student's preferences fell in between. Hong Kong students also displayed more effort and persistence motivation than the other groups. With respect to self-related belief, there were no manifest differences identified in the quantitative data analysis among the groups except for Malaysia whose Chinese students held a

negative academic self-concept, which is highly related to learning performance and personality development (Marsh, 1986). This was also confirmed by some remarks from one Malaysian Chinese student, but another Malaysian student expressed some lack of confidence in the interviews. Regarding learning preference, all the four groups showed positive attitudes towards adopting a cooperative attitude and competitive attitude, and there were no manifest differences identified among these students through both data analyses.

Among other factors that might affect the use of approaches to learning, such as gender, academic faculty, length of stay in Australia, undergraduate or postgraduate, and English ability, the relevant quantitative data analysis indicates that length of stay and English ability have a beneficial impact on the students' approaches to learning. The longer these students stayed in Australia, the more approaches to learning they intended to use, and the more proficiency of English they grasp, the more they are ready to use approaches to learning.

8.2.2 Findings in relation to linguistic, educational and social factors

For Research Question 2: What are the linguistic, educational and social factors which affect Chinese background students in their learning in Australian educational discourse? The answers arose from the qualitative data analysis. One of the findings was the importance of English ability on the students' learning attitudes and behaviour. Good English has inarguable advantages for students not only in learning but also in establishing good relationships with their teachers at university. Another finding revealed that some Australian teachers overlooked Chinese background students with inadequate English, especially those from mainland China and even Malaysia. In the educational context, there was still some misconception identified by Chinese background students who persisted in believing teachers acted not only as knowledge transmitters but also as moral cultivators in their own countries, which was different to the educational concept in Australia of developing the ideology of independent learning in students (Hui, 2005). On this point, the Australian education system is more easily acceptable to Singaporeans. With respect to social factors, the vast majority of Australians were found to be nice to Asian students including Chinese background students. Although a couple of students encountered some racial

harassment occasionally, the overall social environment was still recognised as very friendly and pleasing.

8.2.3 Findings in relation to national identities

For Research Question 4: How do Chinese background students perceive their national identities? The answer identified through the qualitative data analysis indicates that mainland Chinese students are traditional, practical and friendly; Hong Kong students tend to lecture others due to their ideology of being more westernised; Malaysian Chinese students are high-performing but isolated students with open-minds and good English; Singaporean Chinese students thought they were numbered first just because of their advantage of having English as a first language. Both mainland Chinese students and Singaporean Chinese students were proud of being Chinese or Singaporeans, while Hong Kong students were reluctant to admit that they were Chinese.

Research Question 5 asked: the question: How are the national characteristics and identities of these Chinese students perceived and treated by the Australian government? Using critical discourse analysis, the answer was gained from official DIMA (Department of Immigration and Multicultural Affairs) documents relating to financial assessment levels for student visa processing. In analysing the documents, it was seen that Singapore and Malaysia were categorised as Level 1 and did not need to provide any financial evidence, whereas Hong Kong and mainland China were respectively categorised as Level 2 and Level 4 in which students from that region/country must comply with more strict policies. The key issue underlining this policy might be that mainland Chinese students and Hong Kong students are less trustworthy, if not 'dishonest'. Although it can be logically presupposed that some students from mainland China or Hong Kong might have provided some false information, instead of reinforcing the control of these students, the Australian government used discursive strategies to generalise from them to all students from their country/region and in turn generated some negative national characteristics for students from those country/region.

8.2.4 Findings in relation to the misconception of rote-learners

Research Question 6 asked: whether Chinese background students are rote-learners? The findings in examining memorisation strategies used by these students does not show that all these students used memorisation strategies at a high level, meaning that these students were not interested in using memorisation strategies so much as to be rote-learners. This further revealed the misconception among education practitioners in Western societies of assuming that Chinese students are rote learners. The data analysis also indicates that Hong Kong students tended to use memorisation strategies a little more than the other groups of Chinese background students. The qualitative data analysis further demonstrated the arguments pointed out by some researchers (Biggs & Watkins, 1996; Marton et al., 1993; Marton et al., 1996; Tang & Biggs, 1996) that Hong Kong students tended to see memorisation as a pathway to better understanding of knowledge rather than just mechanical memorisation.

8.3 New knowledge and implication for practice

8.3.1 New knowledge to research

By exploring the approaches to learning used by Chinese background students in a large survey and interviews, this research adds to the existing knowledge in two important respects:

First, the survey allows the OECD measurements on approaches to be generalised across the four countries/regions of mainland China, Hong Kong, Malaysia and Singapore where Chinese is their mother tongue for those students. Comparing particular characteristics among these groups of students from different countries and regions helped not only to enable an awareness of their methods of learning but also to construct comparable country profiles in terms of approaches to learning with OECD countries. This helps to make a comparison on approaches to learning within a wider global scope than has ever been done by prior research. Because the measurements of OECD were extended for the first time to Chinese background

students who have always played an important role in international education in this study.

Secondly, a comparison of student approaches to learning across these countries and regions allows us firstly to realise that Malaysian Chinese students lack confidence in doing academic work. The analysis of the results helps identify the degree to which weaker approaches to learning are concentrated in certain groups and therefore whether and where remedial help needs to be focused. The finding helps us know which group of students and in which aspect teachers should put more effort in to help these students to become better learners. This has never been ascertained by other studies.

Lastly, the national identities of these students from mainland China, Hong Kong, Malaysia and Singapore were for the first time compared by exploring their perceptions of each other's national identities in this study. The general impression of Singaporean Chinese students being superior over mainland Chinese students was theorised in the form of research, and the tendency of Hong Kong students to lecture mainland Chinese students and Malaysian students was also first identified.

8.3.2 Implications for practice

Research Question 3 asked: What are the educational and pedagogical implications for Australian tertiary institutions in dealing with Chinese background students? This section reports how the research findings might influence research and teaching in tertiary education in Australia. Each research finding regarding, respectively: approaches to learning; misconception; national identities, and linguistic and social factors would be reflected in relevant educational and pedagogical areas.

The findings in approaches to learning used by the four groups of Chinese background students suggest that educators should pay more attention to both similarities and subtle differences between students from similar cultures but different countries/regions, rather than assuming that students from certain cultures behave in certain ways. By investigating the learning strategies used, it was realised that Singaporean Chinese students tended to adopt more elaboration strategies

compared to other groups at average level. As 'elaboration strategies are also related to performance' (OECD, 2003, p.72), the other groups of students should be encouraged by teachers to apply more elaboration strategies to their learning practice. In terms of motivation, mainland Chinese students showed a stronger intention to instrumental motivation like migration than other groups which showed stronger interest in reading which indicates that interest in reading or in the course content must be developed among mainland Chinese students by educators, as 'interest in reading has a particularly strong link with performance...Such an intrinsic motivation to learn, where it can be fostered, can help students considerably (OECD, 2003, p.72)'. With regards to self-related belief, Malaysian Chinese students need to have more attention devoted to them by the teacher as they were the only group which showed a negative attitude. OECD also found that 'self-related beliefs are closely related to performance (2003, p.72)'.

Understanding the reasons for learning behaviours may provide insights both into similarities and differences in students' learning behaviours across cultures, and into individual students' learning needs. Such information can help teachers teach more effectively.

Another finding arising from the investigation of their approaches to learning once again indicates that Chinese background students are not rote learners, which suggests that educators teaching these students should give more thought to cultural differences between them. Although educators with experience in teaching Chinese students perceived them as passive, dependent, uncritical, and more prone to rote learning than western students, researchers who investigated empirically the learning approaches of Asian students held that these students were neither more oriented towards a surface approach nor less inclined to use a deep approach than western students. Therefore, differences in cultural characteristics and conceptions have been proposed to account for Chinese background students learning practices and to explain the discrepancies in views about these students.

In terms of national identities, the findings that some groups of students were superior to others in different factors like language or being more westernized suggest that respect and equality should be emphasised by Australian educators involved in international education of these students. Although different countries

have different, culturally influenced, value systems and people from different cultures or countries differ in their conceptions about the appropriate ways of relating to and interacting with one another and in their perceptions of self and others (Hofstede, 1980, 1997; Schwartz, 1992, 1994), mutual respect should be advocated among Australian tertiary education discourse by extending mutual communication to enhance understanding and appreciation. In particular, the tendency of generalising the misbehaviour of some people from one country to all students from that country should be prevented. Unfortunately this was evident in the practice of the Immigration Department of Australia.

The findings concerning linguistic and educational factors suggest that more English training support should be given to Chinese background students by educators at Australian universities and the differences between Chinese and Western educational thoughts should also be elaborated to help Chinese background students get through the crucial transition time in their early overseas study. As the quantitative data in this study indicated that the overall English ability of the participating Chinese background students was at average level, and the qualitative data analysis revealed that the students' degree of English proficiency considerably affected their adoption of appropriate approaches to learning, some of them (except for those from Singapore) struggled with their English while doing their coursework. As the University has accepted them as qualified international student applicants meeting certain language requirements, it should take the responsibility of providing some support in English so it is not a barrier to their learning their regular coursework. Most recently in an investigation called 'Evaluation of the General Skilled Migration Categories Report (Birrell, Hawthorne, & Richardson, 2006)' published in May, 2006, the authors, three professors from Monash University, University of Melbourne and Flinders University, revealed the seriousness of an emerging problem concerning the English levels of overseas students. The report suggested increasing the minimum English requirements for migration purpose for overseas students from the overall band of IELTS 5 to 6, in light of unoptimistic feedback from some Australian employers. This indicates the limited progress in English among overseas students during their tertiary education in Australia. The author also argues that this requires some responsibility from educators at Australian universities to make some changes for the better. It is also suggested that educators in Australian tertiary education should help Chinese students to make a smooth transition from their

traditional thinking of a teacher's role as being both knowledge transmitter and moral cultivator, and become independent learners and thinkers. More explanation will be necessary for these students in and out of class.

8.4 Limitations and future research

There is no research that can claim to present precisely and absolutely the truth from the research. This study has inevitable limitations, although a research plan had been carefully designed before the research was undertaken to prevent any possible defects. This thesis has some limitations.

With respect to the analytical parts of this thesis scrutinising the quantitative and qualitative data, the limitation of the research methodology concerns the reliability of the results of the analysis. The limitation stems from the interpretive research strategy utilised, namely that the results are founded on the author's interpretation. Especially, as this researcher is a mainland Chinese student, political correctness might lead me to search for negative aspects of other groups, and at the same time, to expand some merits of mainland Chinese students.

The representativeness of the study sample relative to the four groups of Chinese background students cannot be determined because a vast majority of them were from the University of Tasmania, and only a few from La Trobe University. These two universities are at intermediate level in terms of the comprehensive strength of all Australian universities. It would be more valid if the participants were selected from one top university, one average university and one university from the lowest ten with an equal proportion from each group.

Information collected in the study was by self-report which may be prone to some inaccuracy. As a self-protection mentality of these students might have taken effect in order to avoid any awkwardness and embarrassment. In particular, when talking about their national identities, the interviewees subliminally displayed their sunny and positive sides. And this mentality will affect the real exposure of their intrinsic views of the relevant topics.

The degree of English proficiency that the participants had would have also affected the accuracy of their expressions. Although all the participants had passed the

minimal English requirements set by university, the information they expressed could not be as accurate as if it had been in their first language.

It is a natural outcome of any study to identify some directions for further research. At first, further research focusing on relationships between approaches to learning and learning performance is suggested to see to what degree approaches to learning could exactly lead to good learning performance. In comparison with approaches to learning, the four components of learning strategies, motivation, self-related belief and learning preference need to be analysed separately with learning performance, in order to see which factor will be most related to good learning performance for Chinese background students. The manner of relating approaches to learning to learning performance will provide more insights and instruction to educators and Chinese background students at Australian universities. Secondly, future research should incorporate Taiwan into the research targets, so that the major sources of Chinese background students would all be covered. This was regretfully neglected because of incomparable numbers of Taiwan students at the University of Tasmania and La Trobe University. Lastly, regarding the research method, the Chinese-version questionnaire and interviews in Chinese should be adopted in further research to help the students expose some subtle and in-depth feelings and thoughts.

Reflecting on what was experienced during the PhD candidature, I would, first, say that I greatly appreciated the opportunity that postgraduate study provided for me to engage with this topic in which I had a deep interest; and secondly, I have to mention that the process of undertaking the PhD study remarkably helped me rapidly grow in my academic research skills. It not only sharpened my academic skills, but also built up my interest.

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Appendix 1: the Questionnaire of Approaches to Learning

What are you approaches to learning? Check out by yourself!

1. Chinese background area: (a) Mainland China; (b) Hong Kong; (c) Malaysia; (d) Singapore; (e) Others

2. Gender: (a) Male; (b) Female

3. Academic Faculty: (a) Education; (b) Arts; (c) Science/Engineering/Technology;
(d) Health Science; (e) Law; (f) Business

4. Length of Stay in Australia (up to now):
(a) Within a year; (b) Over one year to two years; (c) Over two years to three years;
(d) Over three years to four years; (e) Over four years

5. Degree (a) undergraduate (b) Postgraduate

English ability

6. Speaking: (a) Excellent; (b) good ; (c) fine; (d) weak ; (e) very weak

7. Listening: (a) Excellent; (b) good ; (c) fine; (d) weak ; (e) very weak

8. Reading: (a) Excellent; (b) good ; (c) fine; (d) weak ; (e) very weak

9. Writing: (a) Excellent; (b) good ; (c) fine; (d) weak; (e) very weak

You are invited to participate individually in a one-hour interview with the researcher for this study.

If you are interested, please contact Dr. Thao Le at 63342320 , email: T.Le@utas.edu.au, or Li Shi at sli1@postoffice.utas.edu.au .

When we receive your email or phone message to indicate your willingness to participate in an interview, we will contact you with detailed information about the interview. (Revised from OECD Questionnaire)

LEARNING STRATEGIES	ALMOST NEVER	SOMETIMES	OFTEN	ALMOST ALWAYS
Memorization Strategies				
10. When I study, I try to memorize everything that might be covered...				
11. When I study, I memorize as much as possible...				
12. When I study, I memorize all new material so that I can recite...				
13. When I study, I practice by saying the material to myself over and over...				
Elaboration Strategies				
14. When I study, I try to relate new material to things I have learned in other subjects...				
15. When I study, I figure out how the information might be useful in the real world...				
16. When I study, I try to understand the material better by relating it to things I already know...				
17. When I study, I figure out how the material fits in with what I have learned...				
Organizational Strategies				
18. When I study, I try to group the material by certain characteristics...				
19. When I study, I try to organize the material by certain categories...				
20. When I study, I try to outline a chapter of a textbook...				
21. When I study, I try to create a conceptual diagram of cause-effect interrelationships...				
Affective Strategies				
22. On weekends, I allow myself a good rest to refresh myself up...				
23. I try to play or do physics exercise at intervals to reduce learning stress and increase learning effectiveness...				

24. When I study, I try to find a quiet place to study to reduce external distractions...				
25. When I study, I try to establish priorities as a way to reduce procrastination...				
Control Strategies				
26. When I study, I start by figuring out what exactly I need to learn...				
27. When I study, I force myself to check to see if I remember what I have learned...				
28. When I study, I try to figure out, as I read, which concepts I still haven't really understood...				
29. When I study, I make sure that I remember the most important things...				

MOTIVATION	ALMOST NEVER	SOMETIMES	OFTEN	ALMOST ALWAYS
Instrumental Motivation				
30. I study to increase my job opportunities...				
31. I study to ensure that my future will be financially secure...				
32. I study to get a good job...				
Interest in Reading	DISAGREE	DISAGREE SOMEWHAT	AGREE SOMEWHAT	AGREE
33. Because reading is fun, I wouldn't want to give it up...				
34. I read in my spare time...				
35. When I read, I sometimes get totally absorbed...				
Effort and Persistence in Learning	ALMOST NEVER	SOMETIMES	OFTEN	ALMOST ALWAYS
36. When studying. I work as hard as possible...				
37. When studying, I keep working even if the material is difficult...				

38. When studying, I try to do my best to acquire the knowledge and skills taught...				
39. When studying, I put forth my best effort...				
SELF-RELATED BELIEFS	ALMOST NEVER	SOMETIMES	OFTEN	ALMOST ALWAYS
Self-efficacy				
40. I'm certain I can understand the most difficult material presented in readings...				
41. I'm confident I can understand the most complex material presented by the teacher...				
42. I'm confident I can do an excellent job on assignments and tests...				
43. I'm certain I can master the skills being taught...				
Academic Self-concept	DISAGREE	DISAGREE SOMEWHAT	AGREE SOMEWHAT	AGREE
44. I learn things quickly in most school subjects...				
45. I do well in tests in most school subjects...				
46. I'm good at most school subjects...				
SELF-REPORT OF SOCIAL COMPETENCIES	DISAGREE	DISAGREE SOMEWHAT	AGREE SOMEWHAT	AGREE
Preference for Co-operative Learning				
47. I like to work with other students...				
48. I learn the most when I work with other students...				
49. I do my best work when I work with other students...				
50. I like to help other people do well in a group...				

51. It is helpful to put together everyone's ideas when working on a project...				
Preference for Competitive Learning				
52. I like to try to be better than other students...				
53. Trying to be better than others makes me work well...				
54. I would like to be the best at something...				
55. I learning faster if I'm trying to do better than the others...				

Appendix 2: Key relevant Literature Reviewed on Culture, Identity, Approaches to Learning, and Learning Processes of Chinese Background Students Is Categorized Below for Reader-Friendly Purposes

Research areas	Research focus	Research approaches	Research findings	Implications for my research
Culture	Cultural capital in understanding mainland Chinese students in Australian high schools. {Stafford, 2004 #78}	Interviews	• functions of embodied cultural capital (an individual's cultural dispositions developed through overseas study) and institutionalised cultural capital (cultural contribution to success) in overseas education; • ability: mainland Chinese students studying in Australian high schools may be here precisely because they are unable to compete in China's education system (p.8); • social Change: with overseas qualifications increasingly accessible and common, their value may decrease (p9).	• it stands to reason that Chinese background students from mainland China, Hong Kong, Malaysian, Singapore in Australia are different groups from ones in their own countries.
	A CHC student success story in one Australian university {Feast, 1997 #134}	Case study	• developed skills in identifying study cues and adapting their learning styles accordingly; • They also appreciate the intrinsic value of education; • they are aware of familial and societal pressure to perform well in their education.	• CHC students outperformed the Australian students in the higher rate range and had a lower failure rate.
	Valuing Cultural Diversity of Chinese undergraduate at Victoria Uni. {Zhang, 2002 #138}	Qualitative methodology by using grounded theory and interview	• cultural and educational backgrounds play a significant role in students' adjustment.	• educational backgrounds play a significant role in students' academic adaptation.
	Intercultural communication experiences of 14 Chinese students in New Zealand from China, Malaysia, Hong Kong, and Taiwan {Holmes, 2000 #140}	Ethnography and inductive inquiry	• cultural identity change as participants negotiate the host environment; • the initiation of third culture building.	
	Cultural communication and miscommunication of Chinese students in a Canadian university {Zhang, 2002 #146}	• ethnographic and naturalistic inquiry • phenomenology and hermeneutics • observation • interview	• cultural factors significantly influenced the Chinese MBA students' sojourn in Canada and played a crucial role in various aspects of their academic work, their off-campus social interaction, their on-campus study-related interaction, and their relationships with Canadians.	• data analysis and interpretation follow the qualitative paradigms of phenomenology and hermeneutics.

		questionnaire		
Research areas	**Research focus**	**Research approaches**	**Research findings**	**Implications for my research**
Identity	Freedom and control – "Big Me and Little Me": a Chinese perspective for counsellors {Back, 2002 #79}	Case study Interview 15 Yr 12 Chinese students in Australian high schools from Hong Kong, Taiwan, Malaysia and China	• big me and little me—a concept of conflicting self: the self closely associated with family and society is known as Big Me or the greater self. The more individual self is known as Little Me or the smaller self. The relationship is just like collectivism and individualism; • four cultural dimensions: self, family, friends and associates, and outsiders and foreigners; • four familial dimensions: face, filial piety, nurture, and control.	• students from Confucian background cultures feature a wealth of subtle and pervasive thinking, derived from socialisation patterns; • in counselling of Chinese students, historical and socio-political differences do exist between students from Taiwan, Hong Kong, Singapore, Malaysia and China, a core of "Chineseness" does seem to unite them.
	Identity and control for 60 Chinese students in Australia in an Australian high school {Back, 2001 #71}	• constructivist paradigm and interpretive perspective • ethnography with 'grounded', naturalistic research • case study • interview	• four interconnected Chinese values and dynamics identified as dimensions and strongly related to socialisation. These dimensions of face, filial piety, control, and nurture, were seen to have implications for the students' identity development and achievement; • in particular, a concept of self, identified, described as Big Me and Little Me, was found to be significant in explaining some of the underlying conflicts associated with identity development; • the tensional state these young people experienced.	• Chinese background student identity in learning: How is their learning identity defined by themselves? Through grounded theory analysis, some dimensions are expected to be identified; • constructivist paradigm and interpretive perspective also seem very appropriate to this study, because they give voice to the Chinese students.
Learning styles	Relationships of thinking styles and personality on Chinese students in Shanghai, China {Zhang, 2001 #45}	Questionnaires: • Thinking Styles Inventory • the NEO Five-Factor Inventory	• thinking styles and Big Five personality dimensions (neuroticism, extraversion, openness to experience, agreeableness and conscientiousness) are related to a degree: the more creativity-generating and more complex thinking styles were related to the extraversion and openness personality dimensions, and the more norm-favouring and simplistic thinking styles were related to neuroticism.	• Zhang admitted that his self-report data of questionnaire are not always highly related with data obtained through behavioural measures. Therefore, in-depth interviews prove to be necessary in this kind of case.
	Critical analysis of Chinese students?{Paton, 2005 #125}		• critical thinking is not specifically a Western construct or preserve of Western culture; • comparative lack of critical quality is due to the difficulties of study	• second language discourse plays an important part in their manifestation of critical thinking

			in the context of edge-of-knowledge discourse in a second language.	
	An evaluation of learning styles, learning issues and learning problems of 260 CHC students studying in Australia {Barron, 2004 #127}	Quantitative and qualitative methods • Learning Styles Questionnaire (Kolb's (1984) Experiential Learning Theory) • group interview	• these students display a preference for a reflector learning style; • but a more passive approach to learning and appreciate the opportunity to reflect on what has been learned; • these students were very versatile regarding their approach to learning and were able to differ their study approaches to take into account the various course requirements.	• Chinese students are reflective but passive learners; • they are very versatile at using appropriate approaches to different learning tasks.
Approaches to learning	A comparison of the relationship between student approaches to learning and stages of cognitive development among U.S and mainland Chinese students {Zhang, 2001 #44}	Perry's theory Questionnaires: • Zhang Cognitive Development Inventory (Zhang, 1995) • Study Process Questionnaire (Biggs, 1987a, 1992) • demographic questionnaire	• higher cognitive developmental levels are positively related to a deep learning approach and lower cognitive-developmental levels are positively associated with surface learning approaches; • more work, travel, and leadership experiences were associated with higher cognitive-developmental levels; • the cognitive-developmental patterns of the American and Chinese participants differed; • no relationship was found between cognitive development and achievement among the Chinese group; • getting students more involved in outside classroom experiences appears to be one way of promoting cognitive development.	• the only study used academic achievement scores as a parameter of measures; • Chinese university students seem not reflective as they tend to think in concrete terms, and then later a conclusion is made that they should not only be provided with clear guidelines to students, but also presented with multiple views so that students are challenged to progress in their cognitive development.
	Three Chinese national groups Subjects (192 Chinese university students from Malaysia, Singapore and Hong Kong) {Smith, 2001 #66}.	A comparative study • questionnaire: Entwistle and Ramsden's (1983) Approaches to Studying Inventory by rating on a 4-point Likert scale	• Malaysian Chinese students would identify themselves as being more dependent in their learning • Singaporean students as being more adept in presenting ideas/concepts in a clear and systematic fashion, • Hong Kong students as being more anxious in their learning approach.	• as evidenced in Smith's study, these students as being more anxious in their learning approaches were all supported; • based on the significant differences in learning approaches noted among the different Chinese subgroups, caution must therefore be taken against forming fixed conceptualisations of cultural characteristics and considerable care be given in sample definition and selection in cross-cultural research.
	Comparing the learning behaviours of Australian and Chinese university students in	A comparative study • questionnaire:	• the results do not support the notions that Chinese students rely mainly on a surface, reproductive mode of learning; and that they	• teachers should reflect on the role they play, whether they should be

	various situations (98 Australia-born Australian and 132 Hong Kong-born Hong Kong third year university students) {Chan, 1999 #111}	SPQ • interview (5 Australian and 7 Hong Kong students)	are passive, uncritical, and dependent. On the contrary, the Chinese students presented themselves as meta-cognitive in their learning; • the requirements of learning tasks, whether assessment is involved, and the behaviours of teachers also play a crucial role in determining whether and how often students use certain learning behaviours.	more approachable or less unapproachable to Chinese students, instead of teaching through fear or holding ideas that answering questions will hinder their work. In addition, these approachable behaviours need to be practised by as many relative educators as possible so that the question-welcoming ethos could be developed.
	Comparison of 202 first year Australian students and 248 first year overseas Chinese students from two Australian universities {Smith, 1998 #91}	• questionnaire: Ramsden and Entwistle's (1983) Approaches to Studying Inventory (ASI)	• significant differences between the specific study strategies of the two groups in relation to effective design of curriculum and course delivery.	• stereotypes held by Western academics that the apparent paradox between a perception of Asian students as rote learners and high academic excellence achieved.
Learning process	Learning strategy development of 12 Chinese background students at a New Zealand university {Skyrme, 2005 #117}	Semi-structured interviews in using • grounded theory • a longitudinal perspective using.	• Chinese participants revealed meta-cognitive abilities in reflecting on their learning process, often with considerable insight. • time pressure and too great a discrepancy between the complexity and lexical weighting of the text and the level of second language knowledge give the lie/deception to the assumption made by many 'western' teachers that Chinese learner are content with surface strategies and rote learning approaches {Biggs, 1996 #121;Macaro, 2001 #120}	• students of Chinese ethnicity have long had a reputation for diligence and academic success, and indeed many students continue to manifest those qualities; • Chinese students are reflective learners. They reflect as they do the value that they personally found in their new learning practices.
	9 mainland Chinese students' experience of learning in Australia {Zhang, 2005 #68}	Interview • ethnographic approach • naturalistic approach	• three major stages of Chinese students' learning: arriving, surviving and transforming; • three highlights: Informal learning is at the central stage of adult learning in cross-cultural contexts; Critical self-reflection plays a significant role in situated learning; Adult learning process in cross-cultural contexts is one of developing self-directed learning skills.	• informal learning and critical self-reflection should be factors to be examined; • naturalistic approach could be taken into consideration

	Academic adaptation of 37 mainland Chinese students In graduate programs at a Canadian university {Liang, 2004 #67}	Qualitative case study • interview • classroom observation • document analysis	• academic adaptation is a very individual matter, each student adapting in a very complicated way, depending upon the degree of readiness they have at each step in their academic progress to go to the next step. • a multi-part flow chart is developed which better reflects the adjustments.	• 'education shock', which is similar to 'culture shock', is an important issue that is confronted by people moving from one country to another country and should be focused in this study.

Appendix 3: Proposed interview questions

General question: How do you feel studying here?

1. for learning strategies:

1a. what learning strategies do you often use?

1b. do you care about learning environment?

2. for motivation:

2a. are you interested in what you are learning?

2b. what (impetus) drives you most to study hard?

3. for self-related beliefs:

3a. are you always scared of difficult tasks in learning?

3b. do you believe you can do well in your study?

4. for learning preferences:

4a. do you like group discussions? Why?

4b. how do you think about competitive learning?

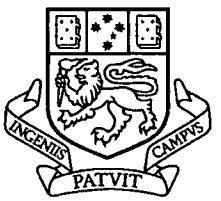
5. for student identities

5a. how do you think about yourself as a mainland Chinese/ Chinese Malaysian/ Singaporean/ Hong Kong student in Australia and in your own country?

5b. how do you think the Australian teacher feels about mainland Chinese/ Chinese Malaysian/ Singaporean/ Hong Kong students?

5c. how does your student identity feel when compared to the students from the other three countries or region in this study?

Appendix 4: Information Sheet (Questionnaire)



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Title:
A comparative study of approaches to learning of Chinese International students in an Australian Tertiary Education Discourse
hief Investigator:
Dr. Thao Lê (Supervisor)
Dr. Kate McPherson (Co-supervisor)
Associate Prof. Mobo Gao (Co-supervisor)

Doctoral Student: LI Shi
Purpose of the Study:
This is a research project to meet Doctorate of Philosophy requirements. One of the aims of the study is to distinguish approaches to learning employed by Chinese international students from different nations and regions.
Direct Benefits:
The research data may potentially reveal the diversities on approaches to learning adopted by different Chinese national student groups in Australian tertiary education and inform approaches to Australian course design and delivery to better fit in with their situations. This study continues the exploration of Asian student approaches to study in the light of such a conventional debate that Chinese students are rote learners.
Student Selection Criteria:
This study involves Chinese international students from mainland China, Malaysia, Singapore and Hong Kong at the University of Tasmania.
Study Procedures/Research Tasks:
You will participate in one questionnaire. The questionnaire is expected to be filled out in five to 10 minutes. It will be distributed in your class with the permission of your lecturers. You can return the questionnaire at the end of your class or place it in a box for this purpose at the International Service Office.
Confidentiality:
Absolute confidentiality and anonymity of your participation in the questionnaire will be maintained. The privacy of the information divulged during the session with

you will be maintained. During the project, data will be stored in a secured locked cabinet.

Once the study is completed, the data will be stored in a secure locked cabinet at the University for a period of 5 years after which yours will be destroyed (shredded).

Freedom to Refuse or Withdraw:

As participation in this study is entirely voluntary, you may withdraw from the study at any time without any effect.

Contact Persons:

Dr. Thao Lê (Chief Investigator/Supervisor) (03) 63 243696
Email: T.Le@utas.edu.au
Li Shi (PhD Student) (03) 62262562 (office)
Email: sli1@postoffice.utas.edu.au

Approval and Concerns/Complaints:

If you have any concerns or complaints of an ethical nature or complaints about the manner in which the project has been conducted, you may contact the Chair, Associate Professor Gino Dal Pont (phone: (03) 62262078) or the Executive Officer, Mrs. Amanda McAully (phone: (03) 62262763).

Results of Investigation:

You will be asked if you would like a copy of a summary of the study's results and subsequent analysis.

Information sheet and consent form:

You will be given copies of the information sheet and statement of informed consent to keep.

Appendix 5: Statement of Informed Student Consent

UNIVERSITY OF TASMANIA
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Dr. Thao Lê
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Email: T..Le@utas.edu.au

Title of project: A comparative study of approaches to learning of Chinese International students in Australian Tertiary Education Discourse

I have read and understood the 'Information Sheet' for this study.
I understand that the study involves my participation in one audio-taped interview of one hour duration on the topic of approaches to learning.
I understand that all research data will be treated as confidential and that I will not be identifiable in any of the published data or documents.
I understand that I have the right to view a transcript of my interview and make any changes that I deem necessary.
Any questions that I have asked have been answered to my satisfaction.
I agree to participate in this interview, and understand that my participation is entirely voluntary and that I can withdraw at any time, for any reason, without prejudice and any data and documents associated with me so far will be totally destroyed in my presence.

Name of student .....

Signature of student ..... Date .....

I have explained this project and the implications of participation in it to this volunteer and I believe that the consent is informed and that he/she understands the implications of participation.

Name of investigator .....

Signature of investigator .....Date .....

Appendix 6: Information Sheet (Interview)

UNIVERSITY OF TASMANIA
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Title:
A comparative study of approaches to learning of Chinese International students in an Australian Tertiary Education Discourse
Chief Investigator:
Dr. Thao Lê (Supervisor)
Dr. Kate McPherson (Co-supervisor)
Associate Prof. Mobo Gao (Co-supervisor)

Doctoral Student: LI Shi

Purpose of the Study:
This is a research project to meet Doctorate of Philosophy requirements. One of the aims of the study is to distinguish approaches to learning employed by Chinese international students from different nations and region.

Direct Benefits:
The research data may potentially reveal the diversities on approaches to learning adopted by different Chinese national student groups in Australian tertiary education and inform approaches to Australian course design and delivery to better fit in with their situations. This study continues the exploration of Asian student approaches to study in the light of such a conventional debate that Chinese students are rote learners.

The interview participation:
A maximum number of ten international Chinese-background students from mainland China, Malaysia, Singapore and Hong Kong at the University of Tasmania will be invited to participate in the interview part of the study. It is expected that there is a balance of participants' regional backgrounds and gender. The main purpose of the interview is to obtain the views and ideas of each interviewee on aspects of their studies in an Australian university, particularly their study approaches. The insights gained from the interview provide a good understanding of the issues and learning experiences of these students in a university context.

The interview will be approximately one hour at the time and place which are convenient to the interviewees and the researcher. It will be recorded by a mini cassette and will later be transcribed for coding and analysis.

Confidentiality:

Your responses will not be identifiable, and that your identity will not be disclosed in the thesis. Interviewees will be coded such as S1 (for Singapore interviewee number 1) and M2 (for Chinese Malaysian interviewee number 2) The privacy of the information divulged during the session with you will be maintained. During the project, data will be stored on audio tape and kept in a secured locked cabinet. Once the study is completed, the audio tape data transcribed and analysed, the audiotapes and transcripts will be stored in a secure locked cabinet at the University for a period of 5 years after which yours will be destroyed (erased/shredded).

You may, should you wish, view a copy of the transcript of the interview and will have the right to check, modify, delete or reject any portion of the information contained within the interview transcript.

Neither you nor your school will be identified by name and extra care will be given to the way your school's profile is recorded in the data so that its identity cannot be definitively ascertained from the information in the data.

Freedom to Refuse or Withdraw:

As participation in this study is entirely voluntary, you may withdraw from the study at any time without any effect. Any data that you submit during the interviews may also be withdrawn at that time.

Contact Persons:

Dr. Thao Lê (Chief Investigator/Supervisor) (03) 63 243696
Email: T.Le@utas.edu.au
Li Shi (PhD Student) (03) 62262562 (office)
Email: sli1@postoffice.utas.edu.au

Approval and Concerns/Complaints:

If you have any concerns or complaints of an ethical nature or complaints about the manner in which the project has been conducted, you may contact the Chair, Associate Professor Gino Dal Pont (phone: (03) 62262078) or the Executive Officer, Mrs. Amanda McAully (phone: (03) 62262763).

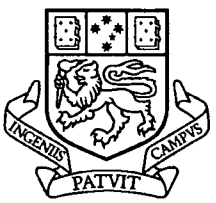
Results of Investigation:

You will be asked if you would like a copy of a summary of the study's results and subsequent analysis.

Information sheet and consent form:

You will be given copies of the information sheet and statement of informed consent to keep.

Appendix 7: Letters to Head of Schools



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To Head of School of _____

Dear _____ ,

We are conducting a study on different approaches to learning of Chinese International students in an Australian Tertiary Education Discourse.

The main aim of the study is to distinguish approaches to learning employed by Chinese international students from different nations and regions who are currently studying at the University of Tasmania.

With your permission, we would like to approach your staff to ask them to allow us to invite their Chinese-background students to participate in a questionnaire, which will take approximately 10 minutes. Several students will be invited to participate individually in a one-hour interview session and the invitation is mentioned in the questionnaire which has our contact phone numbers and emails for them to contact us if they are interested.

The attached information sheet will give you further details of the study.

Your kind assistance would be profoundly appreciated.

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